



Desiccators and Drying Cabinets



The Manual for Drying Cabinets, Desiccators and Glove Boxes

stable | functional | custom-made

The information in our catalogue D 1200 is based on our current technical knowledge and experience as well as on available literature and information from raw material manufacturers.

We assume no liability for the topicality, correctness and completeness of the information provided in this catalogue.

Liability claims against BOHLENDER GmbH referring to material or immaterial damages caused by using or non-using of the information provided and/or by using incorrect and incomplete information are fundamentally excluded as long as there is no evidence of wilful misconduct or gross negligence on the part of BOHLENDER GmbH.

It is the responsibility of the user to check the suitability of our products for the respective application. No specific properties or possible applications can be inferred from our documentation, either explicitly or implicitly.

We reserve the right to make technical changes.

The following brands are registered trademarks of Plexiglas® by Evonik Röhm GmbH.

NEW

You can find our latest innovations under this symbol.



These products conform to the CE regulations. You will receive a certificate with the delivery together with the operating instructions.



These products are particularly appreciated by our customers.

AI

AI-generated image material

All rights reserved, in particular the right to the illustrations and original texts in whole and in part. Reprints, including extracts, require express written authorisation. Insofar as neither a name nor a company name is given the persons depicted in the testimonials are fictitious statements and characters.

Dear Customers and **SICCO** Friends!



We are pleased to present you our new SICCO catalogue showcasing desiccators, drying cabinets and glove boxes. With a new design, clearly arranged chapter pages and detailed product illustrations we moved the essentials into focus in order to fulfill our customers' requirements in the best possible way.

In particular, we would like to refer to the extended choice of glove boxes including different versions, such as with UV exposure, air filtration, air drying and fumigation.

Our SICCO portfolio meets our high standards of quality, sustainability and environmental protection. Being entrepreneur in the fifth generation, we take care of long lasting solutions to create a sustainable and liveable future.

We particularly looking forward to your individual enquiries, ideas and suggestions. As design and production are made by ourselves, a solution adapted to your special requirements is no problem for us.

We will be happy to provide you with a free and non-binding offer for your individual production - already from a quantity of 1 and at a favourable price.

Please do not hesitate to contact us - we look forward to new challenges.

Your

Volker Bohlender

Volker Bohlender

CEO

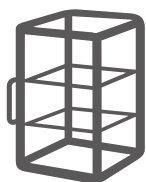


TABLE OF CONTENTS

8 THE COMPANY



This is what SICCO stands for
Questions and Answers! 8
9

10 IN-HOUSE PRODUCTION FOR FIRST-CLASS QUALITY



Special requirements? from 12
All about SICCO from 20

26 DESICCATORS FOR DRYING AND STORAGE



Star Desiccators from 28
Maxi Desiccators from 29
Big Star Desiccators from 30
Mini Desiccators from 34
Desiccator Walls from 40

42 VITRUM DESICCATORS FOR HOT MATERIALS AND AGGRESSIVE SUBSTANCES



Star Vitrum Desiccators 43
Big Star Vitrum Desiccators 44
Maxi 1 Vitrum Desiccators 44
Mini Vitrum Desiccators 47

48 PROTECT DESICCATORS FOR **PHOTOSENSITIVE** **PRODUCTS**



Star Desiccator Protect 49
Big Star Desiccator Protect 49
Maxi Desiccators Protect 50
Mini Desiccators Protect 51

52 BLACK DESICCATORS FOR **LIGHT PROTECTED** **STORAGE**



Star Desiccators Black 53
Big Star Desiccators Black 53
Maxi Desiccators Black 54
Mini Desiccators Black 55

56 DESICCATORS FOR **GASSING**



Super Star Desiccators 58
Super Big Star Desiccators 59
Super Maxi Desiccators 59
Super Desiccators Wall 61
Mini Desiccators Inert gas 62

64 AUTOMATIC DESICCATORS



Auto Star Desiccators 66
Auto Big Star Desiccator 67
Control Star Desiccator 69
Auto Maxi Desiccators 70
Auto Desiccator Walls 71

72 ANTISTATIC DESICCATORS



Star Desiccator Antistatic	<u>74</u>
Big Star Desiccator Antistatic	<u>74</u>
Maxi Desiccators Antistatic	<u>75</u>
Mini Desiccators Antistatic	<u>76</u>
Desiccator Walls Antistatic	<u>77</u>

80 VACUUM DESICCATORS



Vacuum Desiccators	<u>82</u>
Vacum-Desiccator Toploader	<u>85</u>

86 GLOVE BOXES AND EXHAUST HOODS



Glove Boxes with and without Transfer Chamber	<u>from 86</u>
Auto-Glove Boxes with Transfer Chamber	<u>94</u>
Glove Boxes Duo	<u>from 96</u>
Mini Glove Box	<u>100</u>
Gas Dosing Unit	<u>101</u>
Glove Box Air Stream with Transfer Chamber	<u>from 102</u>
Glove Box Pure with Transfer Chamber	<u>104</u>
Gas Saving Valve	<u>105</u>
Air Ionizer	<u>106</u>
Base frame Glove Box	<u>107</u>
Exhaust Hood	<u>108</u>

110 ACCESSORIES - OPTIMIZE YOUR PRODUCTS



Shelves	<u>from 110</u>
Drip trays	<u>from 112</u>
Accessories for Drying	<u>from 114</u>
Fumigation Accessories	<u>from 115</u>
Hygrometer	<u>from 116</u>
Humidity Temperature sensor	<u>from 117</u>
USB-Data logger	<u>from 117</u>
Accessories for Maintenance	<u>from 120</u>
Accessories for Mounting	<u>from 120</u>
Accessories for Glove Boxes	<u>from 120</u>

122 TECHNICAL INFORMATION



Drying performance test with Desiccators	<u>from 122</u>
Drying performance test with Glove Boxes	<u>from 134</u>
Temperature resistance	<u>from 140</u>
Storage of hot materials	<u>from 146</u>
Usable and Working Space	<u>from 146</u>
Grid and guide rails	<u>151</u>
Cleaning of Desiccators	<u>151</u>
Stacking of Desiccators	<u>152</u>
Wall mounting	<u>153</u>
Silica gel basics	<u>from 154</u>
Air humidity	<u>156</u>
Cable lead-ins	<u>158</u>
Gas Dosing Unit	<u>160</u>
Safety instructions	<u>171</u>

Fields of Application of Desiccators

SICCO desiccators and drying cabinets are used in different sectors. Available in different sizes as well as with a maximum of flexibility and functionality, they are covering the full spectrum of protected drying and storage. Discover the wide variety of possibilities with a few practical examples.



Laboratory Storage of Bottles with Toxic or Pure Substances

For example the **SICCO Desiccator Maxi 2** which disposes of two separate chambers with door, bowl and hygrometer. You can find the respective product **on page 31**.



Industry/ Laboratory Storage of Retained Sample

For example the **SICCO Desiccator Super Star** equipable with up to 26 shelves made of polycarbonate, peripheral rubber seal and cylinder look. You can find the respective product **on page 58**.



Medicine Protection of Sensitive Tissue Samples

For example the **SICCO Desiccator Maxi 1** equipable with up to 34 shelves and a temperature resistance of -20° up to +70°C. You can find the respective product **on page 30**.



Metallography Storage of Minerals and Stones

For example the **SICCO Desiccator Maxi 1** as robust depository with a frame made of aluminium profiles and shelves made of stainless steel for a total load of up to 160 kg. You can find the respective product **on page 30**.



Tobacco Industry

Long-Term Storage of Tobacco and Paper

For example the **SICCO Desiccator Maxi 1** as robust depository with a frame of aluminium profiles and shelves made of stainless steel for a total load of up to 160 kg. You can find the respective product [on page 30](#).



Electrical Industry

Temporary Storage of Electronic Components

For example the **SICCO Desiccators Antistatic** where sensitive electronic components such as circuit boards are protected from humidity and particles in the air in tension-free atmosphere. You can find the respective product [on page 72](#).



Photographic Industry

Storage of Equipment

For example the **SICCO Desiccator Maxi 2**, ideal for long-term storage of sensitive photo equipment and optical components under ideal conditions. You will find the respective product [on page 31](#).



Museums and galleries

Storage of Pictures and Art Objects

For example the **SICCO Desiccator Big Star** with preservative effect, including hygrometer and tubings with quick coupling and fumigation with pre-dried air. You will find the respective product [on page 59](#).



Industry

Dry Storage of Labels

For example the **SICCO Desiccator Maxi 1** equipable with up to 34 shelves, bowl and hygrometer. You will find the respective product [on page 30](#).

This is What **SICCO** Stands For

PROVEN STORAGE AND WAREHOUSING TECHNOLOGY

SICCO stands for warehousing technology - family-run in second generation by Volker Bohlender. And for excellent products: Well thought out down to the last detail. Produced in in-house production. Tried and tested many times and further optimised.

MODULAR SYSTEM

Our SICCO products are designed in such a way that they can be modularly extended without additional effort. This flexibility allows us to adapt and extend the system according to the requirements.

EXPERT ADVICE

Our extensive experience in processing and finishing materials, combined with in-depth industry knowledge and a highly qualified team of continuously trained staff guarantees you highest quality of advice.

HUGE VARIETY AND FLEXIBILITY

Our portfolio offers perfect products for nearly every application and requirement. Everything else enables our production, be it a single item or a large-scale production.

FAST AND RELIABLE DELIVERY

Most modern production, well equipped warehouse and optimal processes ensure fast order processing.

HIGHEST QUALITY AND ACCURACY

We strictly orientate us towards the principles of DIN EN ISO 9001:2015. Only tested raw materials are processed. Qualified staff and modern technology guarantee excellent production.

Questions? Can Answer Them



Why Are SICCO Desiccators Rectangular?

Contrary to the classic round desiccators the rectangular form allows an optimal use of the limited surface in a laboratory. Using shelves, the interior space can be used maximally and products can be arranged clearly. Due to the door opening to the front SICCO desiccators can be stacked, if required, and the usable area can be enlarged with the same space requirements.

Can the Desiccators be Extended Modularly?

Our rectangular desiccators offer versatile customization options and offer a modular extension.

Where and How Are the Products Manufactured?

We develop and manufacture ourselves in our headquarters in Grünsfeld, in the South of Germany. This guarantees best quality and allows us to react fast on new or individual requirements.

How do SICCO Products Come to Me?

Orders can be placed by phone, email or online shop. Order processing will be effected by the laboratory supplier. Within Germany we send out within one working day and within Europe within three to five working days.

What if I Am Not Satisfied After All?

The best is to call or email immediately. Depending on the situation we take care for a quick exchange or we rework. If necessary, we ask you a return for review.

And, What About Discounts?

Good that you ask this? In case you take big quantities we allow discounts and special prices, except for custom-made products. Just talk to us.

Is a Custom-Made Production Possible?

Thanks to our own production we can meet individual customer requests, even for small quantities. Talk to our specialist personnel.

In-House Production for First-Class Quality

Whoever wants reliable results needs error-free equipment. We meet this requirement. Beginning with the in-house production of assemblies to the production of the final product, we ensure highest quality standards across all process steps. All our products are designed by our specialists, tried and tested again and again and optimised down to the last detail. Only when you are satisfied, we produce in series. We are flexible and close to practice. This is why we offer such an extensive portfolio, dispose of a well-equipped store and develop quickly new strong products, modifications and custom-made products, if required.



Flexible Production with Modern Machine Park

Thanks to our diverse and modern milling machines we are able to produce our profile parts immediately, what offers maximum flexibility.





Exact Cuts for Your Custom-Made Production

With our modern circular saw we do not only increase our productivity, but also ensure highest precision, particularly for exact cuts of acrylic glass panes.

Bed Milling Machine

The bed milling machine is used for the production of corner profiles and shows its strength especially for custom-made products. Only minimal programming interventions are required to implement your individual requirements.



Requirements? Custom-Made!



Are You Looking for Something Special? Something That Isn't Covered by Our Extensive Portfolio of Sophisticated Solutions?

No problem. As both developers and manufacturers, we offer the option of custom production according to your specific wishes. It's faster, simpler, and more cost-effective than you might think. Just talk to our experts about your ideas – we will advise and support you right from the design stage and then manufacture precisely to your specifications, using the appropriate materials. This service is available for orders starting from a single unit and at a more affordable price than you might imagine.

All we need from you is a drawing (a rough sketch is sufficient) and a little information.

The Checklist for Your Custom-Made Desiccator/ Glove Box:

- ✓ What is the designation of your desiccator/ glove box?
- ✓ For which application shall your desiccator/ glove box be used?
- ✓ Which external dimensions do you require?
- ✓ What do you want to store?
- ✓ What pane material do you require?
- ✓ How many intermediate floors do you need?
- ✓ What maximum charge per intermediate floor do you expect?
- ✓ Which accessories do you need (lock, cable entry, etc.)?
- ✓ What quantity do you need?
- ✓ What budget per unit should not be exceeded?

You have a special request?
Give us a call: **+49 (0) 93 46-92 86-0.**

Or, send us a drawing (rough sketch is sufficient) together with some explanations to **info@sicco.de**. We will contact you to discuss the details and will work out a free quotation.

Standard Plus: Modifications

The fields of application for our SICCO desiccators and drying cabinets extend across a multitude of industries. Offered in various dimensions, they provide maximum flexibility and functionality to encompass the entire scope of protected storage and drying. We invite you to delve into the vast array of possibilities and discover the customized solutions for your specific needs.

Your Advantage:

A Plus in Individuality and Quick Availability

Call us on +49 (0) 93 43-92 86-0



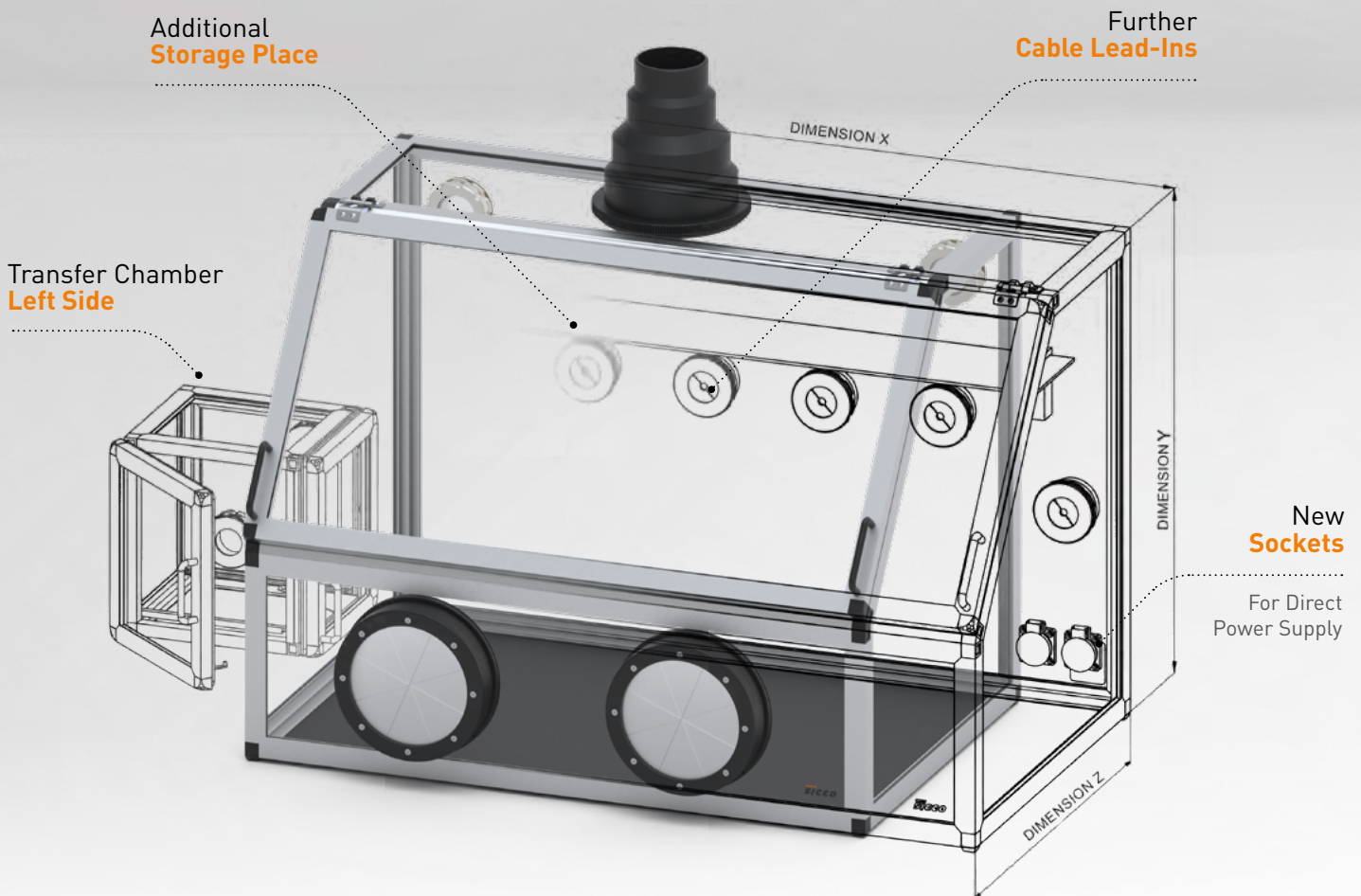
Flexibility and Safety

The shelves in our desiccators are available in polycarbonate, stainless steel, or aluminum, depending on the specific model. To ensure maximum flexibility, they can be positioned at any desired height. Thanks to their excellent stability and tilt-resistance, the fully extendable shelves can be safely and conveniently operated with just one hand.

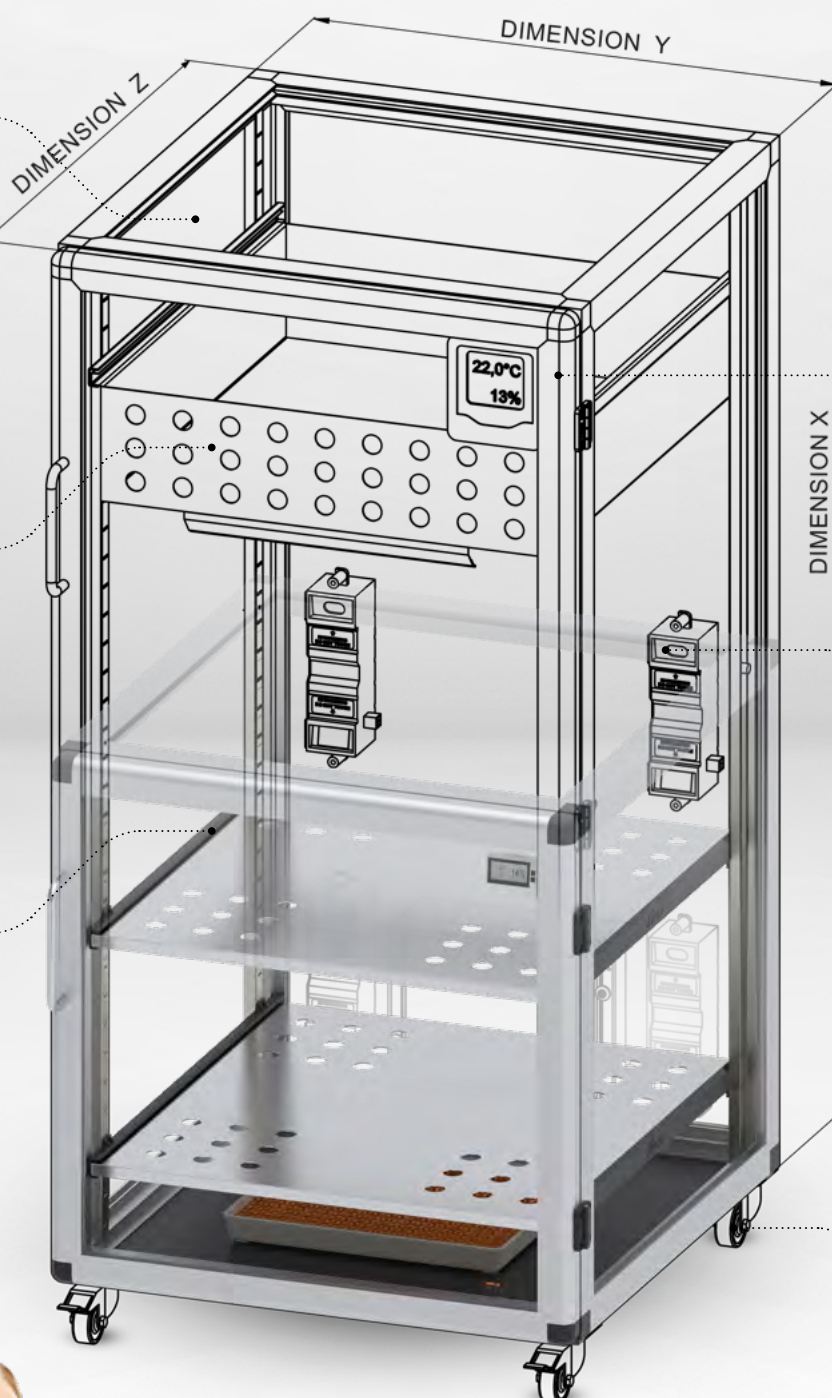


Customised Solutions Made for You

No two laboratories are alike. Every industry and sector has its own requirements. Therefore, the SICCO programme has already many options and extensive accessories. But sometimes a detail is not optimal. In this case we will be happy to adapt our standard products to your personal requirements, such as adjustments in height or additional functions such as a cable lead-in. In most cases this can be done in no time.



Number
of Chambers
Extendable



Larger
Electronic
Hygrometer

Retrofittable
Drawers

Automatic
Reduction of
Air Humidity

Extendable
in Different
Sizes

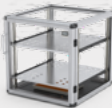
Swivel Castors
with **Two Brakes**



**You have a special request?
Give us a call: +49 (0) 93 46-92 86-0.**

Or, send us a drawing (a rough sketch is sufficient) together with some explanations to info@sicco.de. We will contact you to discuss the details and will work out a free quotation.

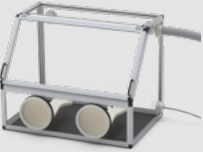
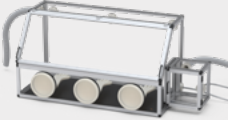
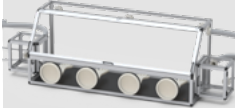
Your Guide to the Suitable Desiccator

	Dust and Humidity For Samples Sensitive to Dust and Humidity	Heated Storage Of Humidity Sensitive Objects	Lockable Storage and Protection from Unauthorised Access	Transportable Protection from Humidity during Transportation
 Mini Desiccators Usable interior space:* W 196 x H 156 x D 181 mm per compartment	Mini Desiccator Basic Page 34, Art. No.: V 1850-01 Mini Desiccator Premium Page 35, Art. No.: V 1950-01		Mini Desiccator Secure Box Page 36, Art. No.: V 1847-06	Mini Desiccator Mobile Page 37, Art. No.: V 1848-06
 Star Desiccators Usable interior space:* W 260 x H 480 x D 330 mm per compartment	Star Desiccator Page 28, Art. No.: V 1871-07 Star Desiccator Horizontal Page 29, Art. No.: V 1899-07 Tower Star Desiccator Page 28, Art. No.: V 1938-07 Star Desiccator Double Page 32, Art. No.: V 1930-07	Star Desiccator Thermo Page 33, Art. No.: V 1830-07	Super Star Desiccator Page 58, Art. No.: V 1875-07 Super Star Desiccator Vitrum Page 58, Art. No.: V 1825-07	
 Big Star Desiccators Usable interior space:* W 495 x H 500 x D 540 mm per compartment	Big Star Desiccator Page 30, Art. No.: V 1896-07 Big Star Desiccator Low Page 31, Art. No.: V 1897-07			
 Maxi Star Desiccators Usable interior space:* W 495 x H 1030 x D 540 mm per compartment	Maxi 1 Desiccator Horizontal Page 29, Art. No.: V 1835-07 Maxi 1 Desiccator Page 30, Art. No.: V 1852-01 Maxi 2 Desiccator Page 31, Art. No.: V 1853-01			Trolley Desiccator Page 32, Art. No.: V 1760-07
 Desiccator Wall Usable interior space:* W 495 x H 500 x D 540 mm per compartment	Desiccator Wall Page 40, Art. No.: V 1994-08		Super Desiccator Wall Page 61, Art. No.: V 1996-08	
 Desiccator Vacuum *The usable interior space varies depending on the model. Further information from page 80.				

*The usable interior space varies depending on the model.
Further information from page [146](#). Please find further accessories from page [110](#).

Hot Substances Storage up to 300°C or Agressive Media	Photosensitive Storage of Photosensitive Subjects	UV-Protection Storage of Photosensitive and UV-Protected Substances	Toxic Chemicals Toxic Chemicals with Device for Fumigation	Long-Term Storage With Automatic Drying/ Constant Air Humidity	Antistatic Electronic Components and Tension-Free Atmosphere	Vacuum Chamber Sensitive Products in Near Vacuum
Mini Desiccator Vitrum Page 47 , Art. No.: V 1811-07	Mini Desiccator Protect Page 51 , Art. No.: V 1842-06	Mini Dessicator Black Page 55 , Art. No.: V 1840-06	Mini Desiccator Inert Gas Page 62 , Art. No.: V 1849-06		Mini Desiccator Antistatic Page 76 , Art. No.: V 1843-06	
Star Desiccator Vitrum Page 43 , Art. No.: V 1825-07 Star Desiccator Vitrum Horizontal Page 43 , Art. No.: V 1821-07	Star Desiccator Protect Page 49 , Art. No.: V 1879-07	Star Desiccator Black Page 53 , Art. No.: V 1891-07	Super Star Desiccator Page 58 , Art. No.: V 1875-07 Super Star Desiccator Vitrum Page 58 , Art. No.: V 1825-07	Auto Star Desiccator Page 66 , Art. No.: V 1877-07 Auto Star Desiccator Vitrum Page 67 , Art. No.: V 1823-07	Star Desiccator Antistatic Page 74 , Art. No.: V 1910-07	
Big Star Desiccator Vitrum Page 44 , Art. No.: V 1844-07	Big Star Desiccator Protect Page 49 , Art. No.: V 1926-07	Big Star Desiccator Black Page 53 , Art. No.: V 1939-07	Super Big Star Desiccator Page 59 , Art. No.: V 1935-07	Auto Big Star Desiccator Page 67 , Art. No.: V 1894-07	Big Star Desiccator Antistatic Page 74 , Art. No.: V 1925-07	
Maxi 1 Desiccator Vitrum Page 44 , Art. No.: V 1846-07 Maxi 2 Desiccator Vitrum Page 46 , Art. No.: V 1845-07	Maxi 1 Desiccator Protect Page 50 , Art. No.: V 1927-07 Maxi 2 Desiccator-Protect Page 50 , Art. No.: V 1928-07	Maxi 1 Desiccator Black Page 54 , Art. No.: V 1936-07 Maxi 2 Desiccator Black Page 54 , Art. No.: V 1937-07	Super Maxi 1 Desiccator Page 59 , Art. No.: V 1932-01 Super Maxi 2 Desiccator Page 60 , Art. No.: V 1933-01	Auto Maxi 1 Desiccator Page 70 , Art. No.: V 1914-01 Auto Maxi 2 Desiccator Page 70 , Art. No.: V 1916-01	Maxi 1 Desiccator Antistatic Page 75 , Art. No.: V 1922-07 Maxi 2 Desiccator Antistatic Page 75 , Art. No.: V 1923-07	
			Super Desiccator Wall Page 61 , Art. No.: V 1996-08	Auto Desiccator Wall Page 71 , Art. No.: V 1995-08	Desiccator Wall Antistatic Page 77 , Art. No.: V 1997-08	
						Vacuum Desiccators Page 82 , Art. No.: V 1880-04 Art. No.: V 1880-08 Art. No.: V 1880-12 Art. No.: V 1882-02

Your Guide to the Suitable Gloves Box

	Toxic Substances For Hazardous Substances Such as Medication Preparation in Inert Atmosphere	Solvents Handling of Solvent- Based Substances in Inert Atmosphere	HEPA Filtration To Prevent Contamination of Proceeded Products or the Surroundings	Direct Suction Of the Interior Space with the Existing Laboratory Extraction System
 Glove Box with two Glove Ports with Transfer Chamber Usable interior space: * W 850 x H 650 x D 550 mm	Glove Box with Transfer Chamber Page 88, Art. No.: V 1982-08	Glove Box Vitrum with Transfer Chamber Page 89, Art. No.: V 1986-08	Glove Box Air Stream with Transfer Chamber Page 102, Art. No.: V 1745-08	
 Glove Box with Two Glove Ports Usable interior space: * W 850 x H 650 x D 550 mm	Glove Box Page 90, Art. No.: V 1984-08			Glove Box with Exhaustion Page 92, Art. No.: V 1988-08
 Glove Box with Three Glove Ports and Transfer Chambers Usable interior space: * W 1240 x H 650 x D 550 mm	Glove Box Trio with Transfer Chamber Page 93, Art. No.: V 1750-08			
 Glove Box with Four Glove Ports and Transfer Chamber Usable Interior Space varies depending on the model. *	Glove Box Duo 1 with Transfer Chamber Page 96, Art. No.: V 1730-08 Glove Box Duo 2 with Transfer Chamber Page 97, Art. No.: V 1710-08			

*Usable interior space varies depending on the model. Further information from page [146](#). Please find further accessories from page [110](#).

Static Charge Avoid Static Charge when Dealing with Electronic Components or Fine Dust-Like Products	Wet Materials Working with Moisture-Sensitive Materials and Products	Sterile Work Area To Avoid Contamination with Germs, Viruses, Bacteria	Team Work Assembly Line Processes Requiring Several Glove Working Spaces in One Box
Glove Box with Transfer Chamber Antistatic Page 91 , Art. No.: V 1992-08	Glove Box Auto with Transfer Chamber Page 94 , Art. No.: V 1755-08	Glove Box Pure with Transfer Chamber Page 104 , Art. No.: V 1740-08	
			Glove Box Trio with Transfer Chamber Page 92 , Art. No.: V 1750-08
Glove Box Duo 1 with 2 Transfer Chambers Antistatic Page 98 , Art. No.: V 1735-08 Glove Box Duo 2 with Transfer Chamber Antistatic Page 99 , Art. No.: V 1715-08			Glove Box Duo 1 with Two Transfer Chambers Page 96 , Art. No.: V 1730-08 Glove Box Duo 2 with Transfer chamber Page 97 , Art. No.: V 1710-08

You can Count on Us. Always. Everywhere.



75 employees in
Grünsfeld

5 trainees/
year

40% female
leadership



39.174
articles

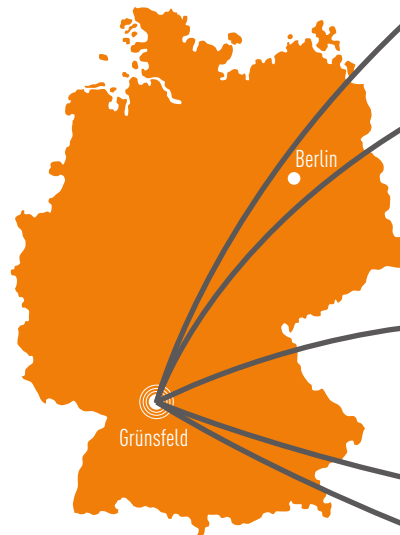
5.826 m³
storage volume

2.842 m²
production area



>257.000

Our photovoltaic system generates
257,000 kWh each year,
saving 150 t of CO₂.



41,3%
export rate



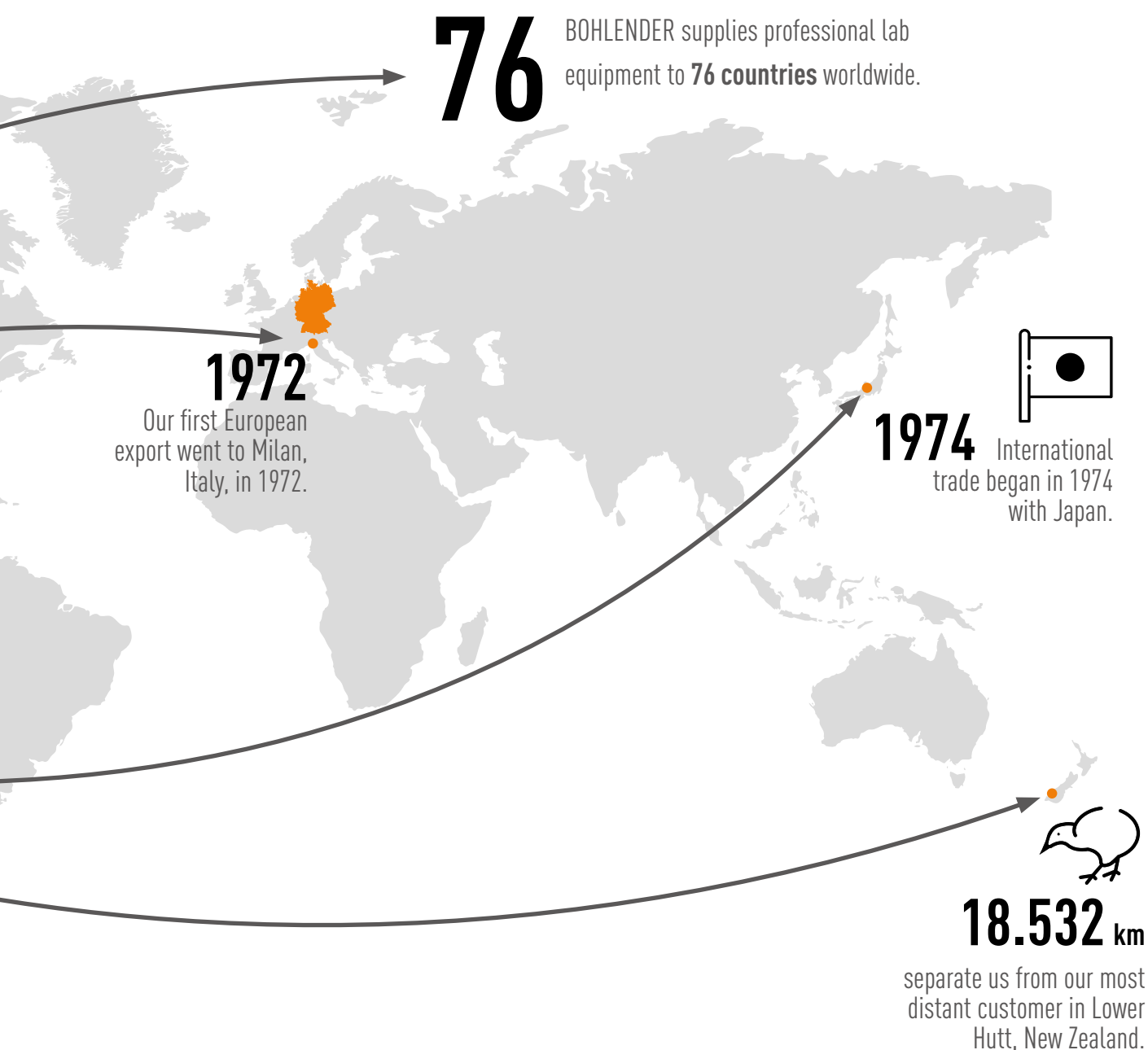
8.000

or more
packages
shipped per
year

7.500 m



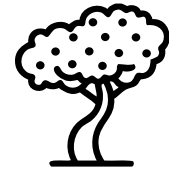
meters of aluminum profiles are
processed annually in our company,
which is almost the height of
Mount Everest.



400 

Every year, we process over 1,500 m² of acrylic glass, which is a total area equivalent to 400 table tennis tables.

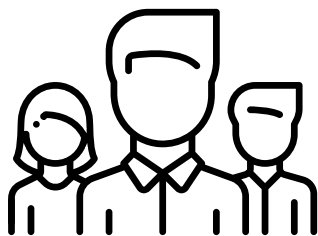
High-Tech and Sustainability? Of course. With us.



1

2.000 years

The traditional orchard cultivation method has proven its worth for 2,000 years.



2

A functional bicycle shelter supports climate-friendly and **healthy mobility**.

3



Protected species find their adapted habitat on our low-nutrient **grasslands**.

 **>257.000**

Our photovoltaic system generates 257,000 kWh each year, saving **150 tons of CO₂**

37t  An intelligent ground cooling system saves us 37 tons of CO₂ annually in machine cooling.

>330  **trees** in our company-owned forest compensate for more than **5,5 t CO₂** per year.



4  Our flower meadow is home to 4 bee colonies.



8  Our infiltration pond slowly releases surface water into the environment, mitigating heat waves and recharging the groundwater supply.



>5.000  Our flower meadow provides a habitat for 5,000 species of animals and a close-to-nature recreational space for our employees.

A Versatile and Committed Company



Lauda-Königshofen Community Foundation

The Lauda-Königshofen Community Foundation was founded at the end of 2013 by committed citizens and companies. The foundation's goals are the development, promotion, and recognition of sustainable and innovative ideas and concepts in the city of Lauda-Königshofen and all its districts. These goals are achieved by strengthening civic engagement and promoting the sustainable development of the community in the areas of family, education, science, environmental and nature protection, health, and local heritage preservation. The company BOHLENDER has its roots in Lauda and has always been closely connected to the city of Lauda-Königshofen. At BOHLENDER, we can fully identify with the idea and goals of the community foundation and are committed as a founding sponsor.

Sports and Youth Promotion

The work with children and youth in local sports clubs helps children, teenagers, and young adults develop their physical, personal, and social skills and actively participate in community life. For several years, BOHLENDER has considered it a



matter of course to provide financial support by sponsoring sportswear for local clubs, which are active in sports such as handball and soccer. After all, those who are healthy and fit can better meet the demands of their private and professional lives.

German Stem Cell Donor File

BOHLENDER supports the campaigns of the German Stem Cell Donor File for stem cell typing. Not just financially: By personally undergoing typing and registering as stem cell donors, we want to give new hope to people suffering from leukemia or other blood formation disorders. Today, many affected individuals can be helped through a stem cell donation. If no suitable donor is found within their own family, patients are dependent on a donation from an unrelated person. With every new typing and registration, the chance of a suitable match increases. Becoming a lifesaver through a small blood donation – BOHLENDER wholeheartedly supports this campaign!

Solar Energy for Low-Emission Production

At SICCO, we take our responsibility for the environment very seriously. Since 2012, we have been operating a photovoltaic system with a surface area of 2,000 m², which enables us to reduce 150 tons of CO₂ emissions annually by relying on solar energy. Furthermore, we handle our materials with care to save energy and actively use recycling opportunities.

Our products are designed to be used multiple times and for many years. We place great importance on minimal material usage and the reduction of production waste. If a product can no longer be used, we ensure that it is properly disposed of and recycled.



SICCO Desiccators for Drying and Storage

The application areas for our SICCO desiccators and drying cabinets extend across a wide range of industries. In various dimensions, they offer maximum flexibility and functionality to cover the entire spectrum of protected storage and drying. Immerse yourself in the great variety of possibilities and discover the custom-made solutions for your specific requirements.



Adjustable and Extendable Shelves

Depending on the model, the shelves of our desiccators are made of polycarbonate, stainless steel, or aluminum. For flexible use, the shelf insertion height is freely selectable. The wide-extending shelves can also be safely operated with one hand due to their late tipping moment.



Stackable Desiccators

Our desiccators not only provide a non-slip grip but are also modularly expandable. They can be easily connected to one another using fastening clamps. For more details, please see page [153](#).



Electronic Hygrometer

Air Humidity and Temperature Always at a Glance

Reinforced Aluminum Frame

Durable and Visually Appealing

Pull-Out and Height-Adjustable Shelves

Easily Accessible and Space-Saving Storage

Panes of Acrylic and Borosilicate Glass

Transparent All Around

Door with Handle

Secure Lock Due to Magnetic Strip

Tray for Desiccant

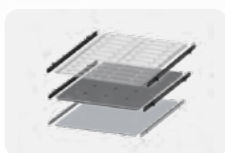
Also to Be Used for Oven Regeneration

Circumferential Rubber Seal

Prevents the Ingress of Humidity

Non-Slip Rubber Feet

For a Secure Stand



Don't forget! More accessories are available starting on page 110. From hygrometers and extra shelves to drip trays and tubes for fumigation, you can get everything you need for your desiccator right here.

SICCO Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

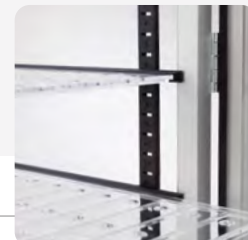


Product Description:

Aluminum frame with acrylic glass panels, includes four polycarbonate intermediate shelves, a tray, a hygrometer, and a desiccant. Can be equipped with up to 26 shelves. Stackable.

Article No.:	V 1871-07
External Dimensions* W x H x D mm	310 x 525 x 375
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



More Accessories

can be found starting on page 110

SICCO Tower Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminium frame with acrylic glass panels, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 38 shelves, stackable.

Article No.:	V 1938-07
External Dimensions* W x H x D mm	310 x 735 x 375
Usable Interior Space W x H x D mm	260 x 690 x 330
Internal Volume Liters	73
Weight kg	8
Max. Load per Shelf / Total Load kg	10 / 40
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-67

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Bench Space and Want to Stack your Desiccators Safely?

Then you can just use our desiccator connectors on page 153.

How to Regenerate Silica Gel

Place it in the included tray for 90 minutes at 90-100 °C in the oven. **Caution:** The microwave is not suitable for this. More information on page 154.

SICCO Star Desiccator Horizontal

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------	---	-------------------------	----------------------



Product Description:

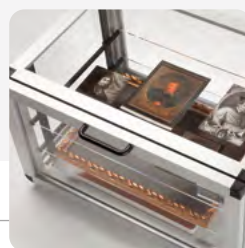
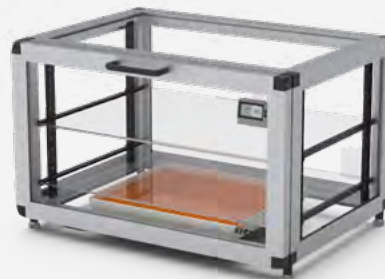
Aluminium frame with acrylic glass panels, including two acrylic glass intermediate shelves, a tray, a hygrometer, and a desiccant, can be equipped with up to 13 shelves, stackable, door opens to the front.

Article No.:	V 1899-07
External Dimensions* W x H x D mm	525 x 340 x 375
Usable Interior Space W x H x D mm	480 x 260 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	1,5 / 30
Usable Area per Shelf mm	460 x 320
Minimum Shelf Spacing mm	13,5
Additional Shelves incl. guide rail	V 1860-73

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Especially suitable for wide, large-surface products such as DIN A3 format paper sheets or printed circuit boards (PCBs).



SICCO Maxi 1 Desiccator Horizontal

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------	---	-------------------------	----------------------

Product Description:

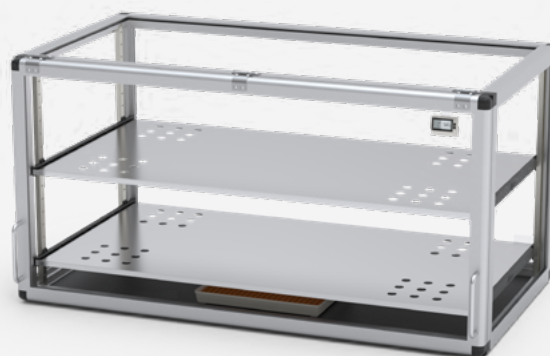
Aluminium frame with acrylic glass panels, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 9 shelves, stackable.

Article No.:	V 1835-07
External Dimensions* W x H x D mm	1080 x 555 x 580
Usable Interior Space W x H x D mm	1030 x 500 x 500
Internal Volume Liters	311
Weight kg	29
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	1000 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-05

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Especially suitable for wide, large-surface products such as paper sheets. Swing door opening upwards for easy loading. Reduced height allows placement on shelves.



SICCO Big Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

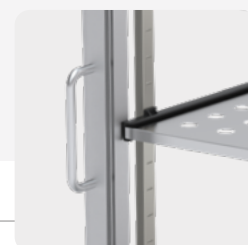
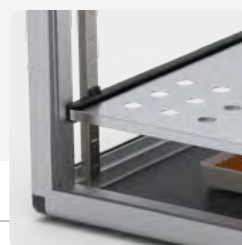


Product Description:

Aluminium frame with acrylic glass panels, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 8 shelves.

Article No.:	V 1896-07
External Dimensions* W x H x D mm	560 x 560 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	18
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Maxi 1 Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminum frame with acrylic glass panels, including four stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 17 shelves.

Article No.:	V 1852-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	30
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Maxi 2 Desiccator

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------	---	-------------------------	----------------------



Product Description:

Aluminium frame with acrylic glass panels, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, and two hygrometers, four swivel castors (two with brakes), can be equipped with up to 8 shelves per chamber.

Article No.:	V 1853-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space per chamber W x H x D mm	495 x 500 x 540
Internal Volume per chamber Liters	156
Weight kg	34
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Big Star Desiccator Low

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------	---	-------------------------	----------------------

Product Description:

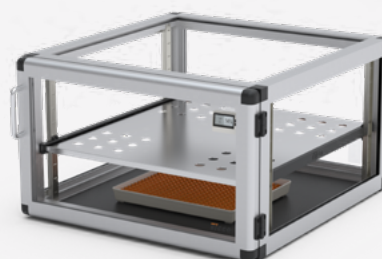
Aluminium frame with acrylic glass panels, including one stainless steel intermediate shelf, a tray, and a hygrometer, can be equipped with up to 5 shelves, stackable.

Article No.:	V 1897-07
External Dimensions* W x H x D mm	550 x 330 x 580
Usable Interior Space W x H x D mm	495 x 250 x 500
Internal Volume Liters	91
Weight kg	13
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Especially suitable for wide, large-surface products such as paper sheets. Low height allows placement on shelves. Conventional laboratory glass bottles with a content of up to 1000 ml can be stored inside without any problems.



SICCO Trolley Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Casters

Product Description:

Aluminium frame with acrylic glass panels, top side with aluminium worktop, including four stainless steel intermediate shelves, a tray, and a hygrometer, four swivel castors (two with brakes), side push handle, can be equipped with up to 28 shelves.

Article No.:	V 1760-07
External Dimensions* W x H x D mm	600 x 900 x 430
Usable Interior Space W x H x D mm	550 x 850 x 350
Internal Volume Liters	195
Weight kg	27
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	527 x 365
Minimum Shelf Spacing mm	17

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Aluminium worktop for use as a storage surface during loading or unloading and for extending existing workspace. The push handle, in combination with the smooth-running swivel castors, allows the loaded trolley to be moved by pushing or pulling without great effort. Reduced depth for adaptation to confined spaces.



SICCO Star Desiccator Double

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

NEW

Product Description:

Aluminium frame with acrylic glass panels and double doors, including four stainless steel intermediate shelves, a tray, a hygrometer, and a desiccant. Can be equipped with up to 26 shelves, stackable.

Article No.:	V 1930-07
External Dimensions* W x H x D mm	630 x 520 x 375
Usable Interior Space W x H x D mm	570 x 480 x 330
Door opening width right mm	275
Total opening width mm	570
Internal Volume Liters	106
Weight kg	13
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	552 x 320
Minimum Shelf Spacing mm	7,5
Additional Shelves incl. guide rail	V 1860-61

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications: Especially suitable for wide products such as DIN A3-format paper sheets or printed circuit boards (PCBs). The doors can be opened individually to the right and left for easy loading and removal. The bar attached to the left door serves as a stop for the door seal.



SICCO Star Thermo Desiccator

Panels: Clear	Material: PMMA / Glass	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	---------------------------	---	-------------------------	----------------------

Product Description:

Aluminium frame with 2-pane double-chamber system (glass inside, acrylic glass outside), including four polycarbonate intermediate shelves, can be equipped with up to 26 shelves. Integrated heater (850 W) with temperature sensor and fan. A power connection (230 V / 50 Hz) is required.



Article No.:	V 1830-07
External Dimensions* W x H x D mm	310 x 630 x 420
Usable Interior Space W x H x D mm	260 x 480 x 330
Additional Space Required for Fan Heater mm	80 rear
Internal Volume Liters	55
Weight kg	16
Max. Load per Shelf / Total Load kg	2,5 / 10
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68
Temperature Range	Ambient +5 °C to +60 °C
Setting Accuracy	1 °C
Spatial Temperature Deviation	approx. ±1.75 °C at 40 °C
Heating System	Forced air circulation
Power Consumption	850 W
Mains Connection	230 V / 50 Hz

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Ideal for preheating samples and substances to shorten the reaction time or intermediate storage at a constant ambient temperature. By keeping the temperature above the dew point, no moisture can condense on products placed inside.

The SICCO Forced-Air Heating System – How It Works

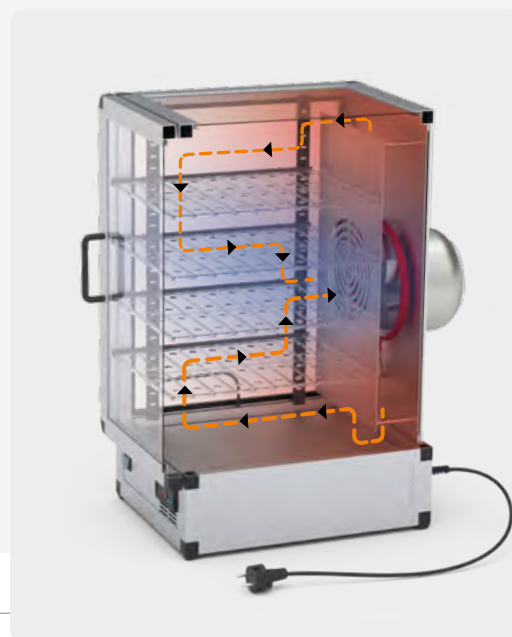
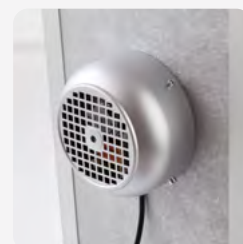
The fan in the rear wall draws in the air inside and blows it over the heating coil. Simultaneously, the heated air flows back into the interior. This circuit ensures that the interior is uniformly heated.

The actual temperature inside the desiccator is constantly monitored via the temperature sensor. Once the setpoint temperature is reached, the heater switches off. Simultaneously, the fan continues to run, ensuring that the heat remains uniformly distributed inside.

As soon as the interior temperature falls by 2 °C below the set value, the heating is switched on automatically.

More Accessories

can be found starting on page 110



SICCO Mini Desiccators Basic

Panels: **Clear** Material: **Polycarbonate** Temperature Resistance: **-35 °C to +70 °C** Use: **Normal Pressure** Base: **Rubber Feet**



Version Mini 1

Polycarbonate, one chamber, including desiccant, can be equipped with up to two intermediate shelves, stackable.

Article No.:	V 1850-01
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load kg	3
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Version Mini 2

Polycarbonate, two chambers permanently connected to one another, including two desiccants, can be equipped with up to four intermediate shelves, stackable.

Article No.:	V 1850-02
External Dimensions* W x H x D mm	221 x 362 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181 per chamber
Internal Volume Liters	6,2 per chamber
Weight kg	1,8
Max. Load kg	3 per chamber
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Version Mini 3

Polycarbonate, three chambers permanently connected to one another, including three desiccants, can be equipped with up to six intermediate shelves, stackable.

Article No.:	V 1850-03
External Dimensions* W x H x D mm	221 x 540 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181 per chamber
Internal Volume Liters	6,2 per chamber
Weight kg	2,7
Max. Load kg	3 per chamber
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties !
Please see our notes on page 124

More Accessories !
can be found starting on page 110

SICCO Mini Desiccators Premium

Panels: Clear	Material: Polycarbonate	Temperature Resistance: -35 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
-------------------------	-----------------------------------	--	--------------------------------	-----------------------------

Version Mini 1

Polycarbonate, one chamber, including two intermediate shelves — can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet, stackable.

Article No.:	V 1950-01
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Version Mini 2

Polycarbonate, two chambers permanently connected to one another, including four intermediate shelves — can be equipped with up to four intermediate shelves, hygrometer, two desiccants, non-slip feet, stackable.

Article No.:	V 1950-02
External Dimensions* W x H x D mm	221 x 362 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181 per chamber
Internal Volume Liters	6,2 per chamber
Weight kg	1,8
Max. Load per Shelf / Total Load kg	2 / 3 per chamber
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Version Mini 3

Polycarbonate, three chambers permanently connected to one another, including six intermediate shelves — can be equipped with up to six intermediate shelves, hygrometer, three desiccants, non-slip feet, stackable.

Article No.:	V 1950-03
External Dimensions* W x H x D mm	221 x 540 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181 per chamber
Internal Volume Liters	6,2 per chamber
Weight kg	2,7
Max. Load per Shelf / Total Load kg	2 / 3 per chamber
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Do you Already Know?
Mini Vitrum Desiccator
made of borosilicate glass
page 47

SICCO Mini Desiccator Secure Box Basic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

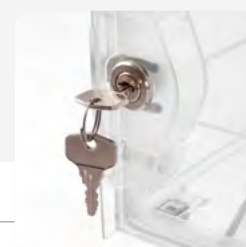
Polycarbonate, door with integrated lock, one chamber, can be equipped with up to two intermediate shelves, including desiccant, stackable.

Article No.:	V 1847-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load kg	3
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Safe storage of small parts, very handy.



SICCO Mini Desiccator Secure Box Premium

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

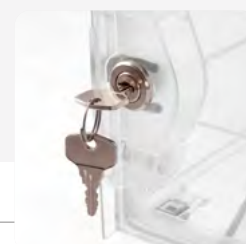
Polycarbonate, door with integrated lock, one chamber, including two intermediate shelves — can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet, stackable.

Article No.:	V 1947-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Safe storage of small parts, very handy.



Mini-Desiccators

Production by injection molding allows the use of different materials and makes the Mini-Desiccators particularly versatile.

SICCO Mini Desiccators Premium

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

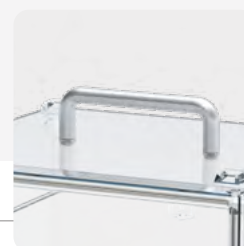
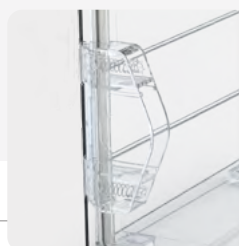
Polycarbonate, with a convenient carrying handle, one chamber, can be equipped with up to two intermediate shelves, including desiccant.

Article No.:	V 1848-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	1
Max. Load kg	3
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

More Accessories

can be found starting on page 110



SICCO Mini Desiccator Mobil Premium

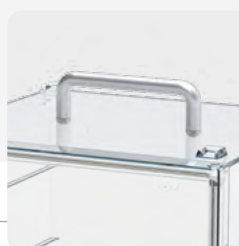
Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Polycarbonate, with a convenient carrying handle, one chamber, including two intermediate shelves — can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet.

Article No.:	V 1948-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	1
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

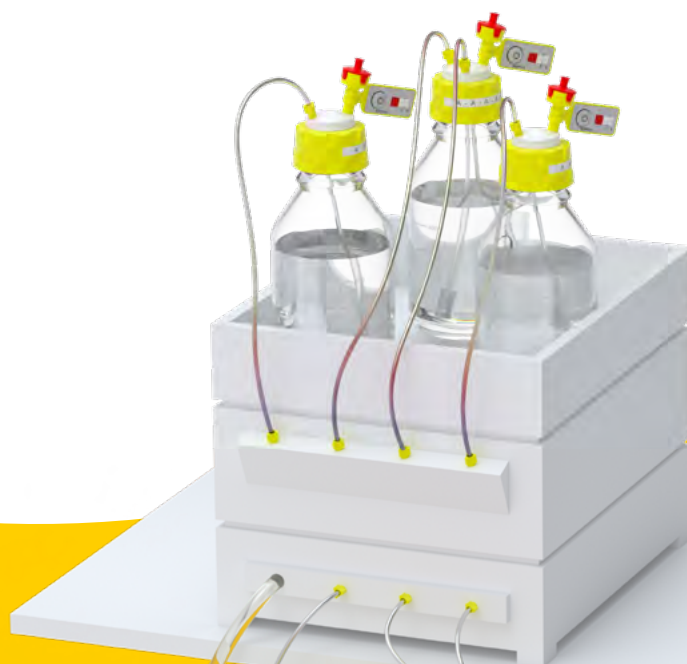


Are You Looking for an Easy-to-Transport Desiccator?

SICCO Mini-Desiccators are compact in their dimensions and can be transported anywhere due to their low weight.

Also from Bohlender.

b.safe



Sophisticated Safety Solutions for HPLC.

**Simple. Better. Faster.
Directly from the
Manufacturer.**

When it comes to quality and safety, we leave nothing to chance: We develop, design, and manufacture HPLC solutions ourselves.



Request a catalog now or find information at:
bsafe.de or +49 (0) 93 46-92 86-0

**bsafe.de/en/
products**

Also from Bohlender.

b.safe SYSTEM

Individual Installation Systems for Safe Solvent Disposal and Waste Management in the Laboratory.



[bsafe.de/en
system](https://bsafe.de/en/system)

Desiccator Wall for Drying and Storage



- + ✓ Spacious
- ✓ Portable
- ✓ Functional

SICCO **Desiccator Wall**

Panels: **Clear** Material: **PMMA** Temperature Resistance: **-20 °C to +70 °C** Use: **Normal Pressure** Base: **Rubber Feet**

Product Description:

Aluminium frame with acrylic glass panels, six separate chambers and six doors, including six stainless steel intermediate shelves, six trays, and six hygrometers, four swivel castors (two with brakes), can be equipped with up to 8 shelves per chamber.

Article No.:	V 1994-08
External Dimensions* W x H x D mm	1080 x 1870 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	100
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Max. Load kg	200
Ground Clearance to Lower Chamber mm	240
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



What to Do if the Humidity Does Not Drop

Check if the door closes properly or if the circumferential seal is damaged. Regenerate your silica gel or increase the amount. Test the function of the hygrometer. See page 157

Vitrum Desiccators – Hot Materials and Agressive Substances



- ✓ Reinforced aluminum frame with panels of heat-resistant borosilicate glass 3.3
- ✓ For placing hot substances (max. 300°C)
- ✓ Very good resistance to aggressive media
- ✓ Easy-to-read electronic hygrometer

SICCO Star Vitrum Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-70 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including four stainless steel intermediate shelves, a tray, a hygrometer, and a desiccant, can be equipped with up to 26 shelves, stackable.

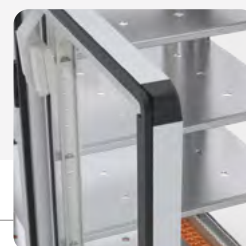
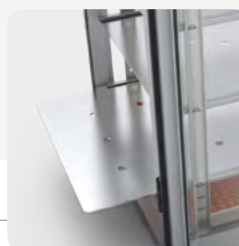


Article No.:	V 1841-07
External Dimensions* W x H x D mm	310 x 525 x 375
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	14
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	15,5
Additional Shelves incl. guide rail	V 1860-51

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Ideal for introducing hot substances (max. 300°C), very good resistance to most acids and organic substances.



SICCO Star Vitrum Desiccator Horizontal

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-70 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including two aluminium intermediate shelves, a tray, a hygrometer, and a desiccant, can be equipped with up to 13 shelves, stackable, door opens to the front.

Article No.:	V 1821-07
External Dimensions* W x H x D mm	525 x 340 x 375
Usable Interior Space W x H x D mm	480 x 260 x 330
Internal Volume Liters	51
Weight kg	12
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	460 x 320
Minimum Shelf Spacing mm	13,5
Additional Shelves incl. guide rail	V 1860-57

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Ideal for introducing hot substances (max. 300°C), very good resistance to most acids and organic substances.



More Accessories

can be found starting on page 110



SICCO Big Star Vitrum Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-70 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 17 shelves.

Article No.:	V 1844-07
External Dimensions* W x H x D mm	560 x 560 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	22
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Maxi 1 Vitrum Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-70 °C to +150 °C	Normal Pressure	Rubber Feet

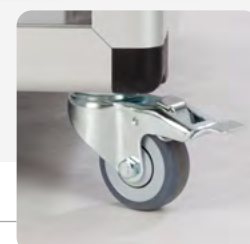
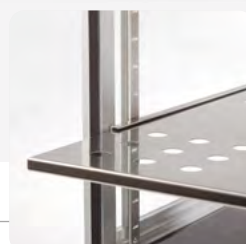


Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including four stainless steel intermediate shelves, a tray, and a hygrometer, four swivel castors (two with brakes), can be equipped with up to 34 shelves.

Article No.:	V 1846-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	37
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties

Please see our notes on page 124

Also from Bohlender



Professional Laboratory Equipment Made of High- Performance Plastics

PTFE | PFA | FEP

Stirrer shafts, magnetic stirring bars or tubing. These are three of over 1,000 innovative BOLA products made of high-performance plastics. For fast, precise, and safe work in the laboratory.

Request a catalogue now or find information at:
bola.de/en or **+49 (0) 93 46-92 86-0**



**[bola.de/en/
products](https://bola.de/en/products)**

A BRAND OF BOHLENDER

SICCO Maxi 2 Vitrum Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-70 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, and two hygrometers, four swivel castors (two with brakes), can be equipped with up to 17 shelves per chamber.

Article No.:	V 1845-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	42
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Ideal for introducing hot substances (max. 300°C), very good resistance to most acids and organic substances.



Stable Desiccators

With a frame made of aluminum profiles and glass-fiber reinforced corner connectors, the SICCO desiccators are particularly stable while having a low weight - ideal for our application.



SICCO Mini Vitrum Desiccator

Panels: Clear	Material: Borosilicate 3.3	Temperature Resistance: -70 °C to +150 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------------------	--	-------------------------	----------------------

NEW

Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including one aluminium intermediate shelf—can be equipped with a maximum of one intermediate shelf, hygrometer, and desiccant, non-slip feet, stackable.

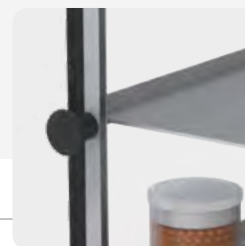


Article No.:	V 1811-07
External Dimensions* W x H x D mm	220 x 183 x 214
Usable Interior Space W x H x D mm	200 x 170 x 180
Internal Volume Liters	6
Weight kg	2
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	22 x 182
Minimum Shelf Spacing mm	82

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

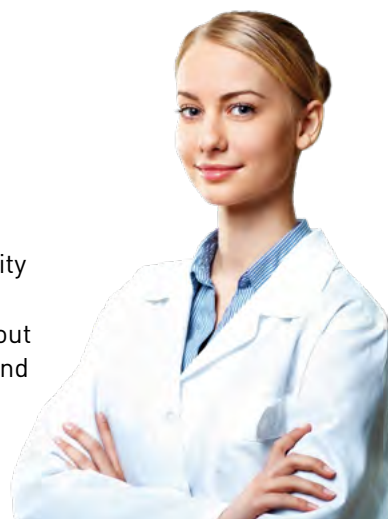
Applications:

Ideal for introducing hot substances (max. 300°C), very good resistance to most acids and organic substances.



SPECIAL REQUIREMENTS? CUSTOM-MADE!

No problem: As developers and manufacturers, we offer you the possibility of individual production according to your wishes. This is faster, simpler, and often more economical than you think. Simply talk to our experts about your ideas - we will advise and support you right from the design stage and then manufacture precisely to your specifications using the appropriate materials. And this is possible starting from a quantity of 1.



Do You have a Special Request?
Give us a call: **+49 (0) 93 46-92 86-0**

or send us a drawing (a rough sketch is sufficient) and some information to **info@sicco.de**. We will then contact you to discuss the details and create a free offer for you.

Protect Desiccators for Photosensitive Products



- ✓ Orange-colored panels reduce light incidence
- ✓ Especially for the storage of photosensitive substances

SICCO Star Desiccator Protect

Panels: Orange	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
--------------------------	--------------------------	--	--------------------------------	-----------------------------

Product Description:

Aluminium frame, orange acrylic glass panels inhibit light incidence and act as UV protection, including four polycarbonate intermediate shelves, a tray, a hygrometer, and desiccant, can be equipped with up to 26 shelves, stackable.

Article No.:	V 1879-07
External Dimensions* W x H x D mm	310 x 525 x 375
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Especially suitable for the storage of light-sensitive substances.



SICCO Big Star Desiccator Protect

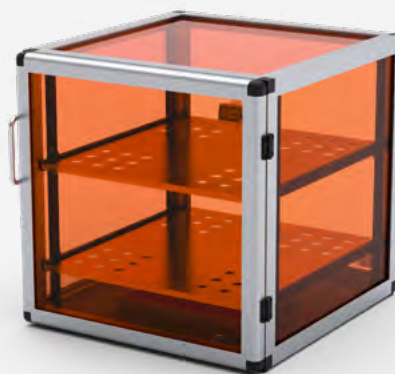
Panels: Orange	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
--------------------------	--------------------------	--	--------------------------------	-----------------------------

Product Description:

Aluminium frame, orange acrylic glass panels inhibit light incidence and act as UV protection, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 8 shelves.

Article No.:	V 1926-07
External Dimensions* W x H x D mm	560 x 560 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	18
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Shelves

The insertion height of the shelves is very flexible. Even the products in the rear area are easily accessible due to the extendable shelves.

More Accessories

can be found starting on page 110



SICCO Maxi 1 Desiccator Protect

Panels:	Material:	Temperature Resistance:	Use:	Base:
Orange	PMMA	-20 °C to +70 °C	Normal Pressure	Casters

Product Description:

Aluminium frame, orange acrylic glass panels inhibit light incidence and act as UV protection, including four stainless steel intermediate shelves, a tray, and a hygrometer, four swivel castors (two with brakes), can be equipped with up to 17 shelves.

Article No.:	V 1927-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	30
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Especially suitable for the storage of light-sensitive substances.



SICCO Maxi 2 Desiccator Protect

Panels:	Material:	Temperature Resistance:	Use:	Base:
Orange	PMMA	-20 °C to +70 °C	Normal Pressure	Casters



Product Description:

Aluminium frame, orange acrylic glass panels inhibit light incidence and act as UV protection, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, and two hygrometers, four swivel castors (two with brakes), can be equipped with up to 8 shelves per chamber.

Article No.:	V 1928-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	34
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Light-Protected Storage

The Protect desiccators, with their orange-colored panels, are excellently suited for storing UV-sensitive electronic components such as photosensitive resistors.



SICCO Mini Desiccator Protect Basic

Panels:	Material:	Temperature Resistance:	Use:
Orange	Polycarbonate	-35 °C to +70 °C	Normal Pressure

Product Description:

Orange polycarbonate inhibits light incidence and acts as UV protection, one chamber, can be equipped with up to two intermediate shelves, including desiccant, stackable.

Article No.:	V 1842-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Total Load, Evenly Distributed kg	3
Additional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Mini Desiccator Protect Premium

Panels:	Material:	Temperature Resistance:	Use:
Orange	Polycarbonate	-35 °C to +70 °C	Normal Pressure

Product Description:

Orange polycarbonate inhibits light incidence and acts as UV protection, one chamber, including two intermediate shelves — can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet, stackable.

Article No.:	V 1942-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Additional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Grid and Guide Rails

The rail system of the Star Desiccators is provided with consecutive numbering to position shelves quickly and correctly. See page 151

Black Desiccators for Light-Protected Storage



- ✓ Black, absolutely opaque panels
- ✓ for storage under exclusion of light and UV radiation

SICCO Star Desiccator Black

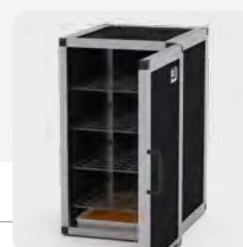
Panels:	Material:	Temperature Resistance:	Use:	Base:
Black	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminium frame, panels made of black, light- and UV-impermeable acrylic glass, high-gloss surfaces, including four polycarbonate intermediate shelves, a tray, a hygrometer, and desiccant, can be equipped with up to 26 shelves, stackable.

Article No.:	V 1891-07
External Dimensions* W x H x D mm	310 x 525 x 375
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Big Star Desiccator Black

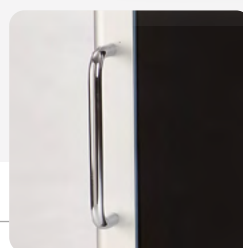
Panels:	Material:	Temperature Resistance:	Use:	Base:
Black	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminium frame, panels made of black, light- and UV-impermeable acrylic glass, high-gloss surfaces, including two stainless steel intermediate shelves, a tray, and a hygrometer, can be equipped with up to 8 shelves.

Article No.:	V 1939-07
External Dimensions* W x H x D mm	560 x 560 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	18
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties

Please see our notes on page 124

SICCO Maxi 1 Desiccator Black

Panels:	Material:	Temperature Resistance:	Use:	Base:
Black	PMMA	-20 °C to +70 °C	Normal Pressure	Casters

Product Description:

Aluminum frame, panels made of black, light- and UV-impermeable acrylic glass, high-gloss surfaces, including four stainless steel intermediate shelves, a tray, and a hygrometer, four swivel castors (two with brakes), can be equipped with up to 17 shelves.

Article No.:	V 1936-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	30
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties

Please see our notes on page 124

SICCO Maxi 2 Desiccator Black

Panels:	Material:	Temperature Resistance:	Use:	Base:
Black	PMMA	-20 °C to +70 °C	Normal Pressure	Casters

Product Description:

Aluminium frame, panels made of black, light- and UV-impermeable acrylic glass, high-gloss surfaces, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, and two hygrometers, four swivel castors (two with brakes), can be equipped with up to 8 shelves per chamber.

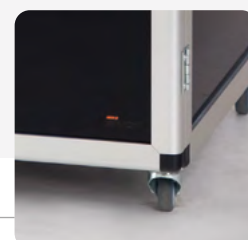
Article No.:	V 1937-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	34
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



More Accessories

can be found starting on page 110



SICCO Mini Desiccator Black Basic

Panels: **Black** Material: **Polycarbonate** Temperature Resistance: **-35 °C to +70 °C** Use: **Normal Pressure**

Product Description:

Black, opaque polycarbonate prevents light incidence and acts as UV protection, one chamber, can be equipped with up to two intermediate shelves, including desiccant, stackable.

Article No.:	V 1840-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. load, Evenly Distributed kg	3
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Mini Desiccator Black Premium

Panels: **Black** Material: **Polycarbonate** Temperature Resistance: **-35 °C to +70 °C** Use: **Normal Pressure**

Product Description:

Black, opaque polycarbonate prevents light incidence and acts as UV protection, one chamber, including two intermediate shelves—can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet, stackable.

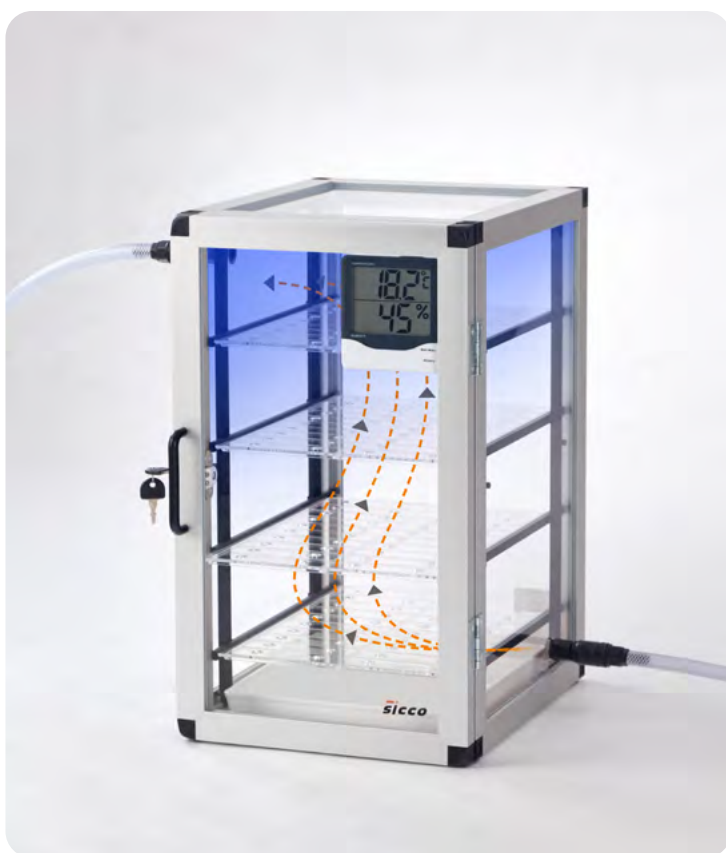
Article No.:	V 1940-06
External Dimensions* W x H x D mm	221 x 183 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Desiccators for Gassing

The SICCO desiccators for gassing provide ideal conditions for the storage of reactive substances under lock and key. When the door is tightly closed, inert gases or unreactive gases, such as nitrogen, can be introduced. Unlike the ambient air, these do not react with the stored substances due to their inertness.



This is How the Gas Supply for Gassing Desiccators Works:

The goal of gassing is to reduce the humidity or oxygen inside the desiccator. For this purpose, the corresponding gases are introduced, which flow through the desiccator and displace the air. Depending on its density, the gas can be introduced from either the bottom or the top.



Advantages of the Quick Coupling

The gas supply can be quickly interrupted, and the desiccator is simultaneously sealed tightly by the integrated valves. This facilitates daily handling.





By the way! More accessories are available from page 110. Whether it's quick couplings, additional shelves, casters, or hoses for gassing. Here you will find everything you need for your desiccator.

SICCO Super Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with acrylic glass panels, including four polycarbonate intermediate shelves, a tray, a hygrometer, desiccant, cylinder lock, and hose (L = 5m) with two quick couplings for gassing, can be equipped with up to 26 shelves, stackable.

Article No.:	V 1875-07
External Dimensions* W x H x D mm	310 x 525 x 375
Additional space required for coupling mm	150 per side
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	10 / 30
Quick coupling – Diameter mm	Ø 6
Panel bores top left and bottom right (mm)	Ø 16,5
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Super Star Desiccator Vitrum

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-20 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, including four stainless steel intermediate shelves, a tray, a hygrometer, desiccant, cylinder lock, and hose (L = 5m) with two quick couplings for gassing, can be equipped with up to 26 shelves, stackable.

Article No.:	V 1825-07
External Dimensions* W x H x D mm	310 x 525 x 375
Additional space required for coupling mm	150 per side
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	15
Max. Load per Shelf / Total Load kg	10 / 30
Quick coupling – Diameter mm	Ø 6
Panel bores top left and bottom right (mm)	Ø 16,5
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	15,5
Additional Shelves incl. guide rail	V 1860-51

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Applications:

Interior made of chemically highly resistant materials (aluminium, stainless steel, borosilicate glass) for the storage of aggressive products.



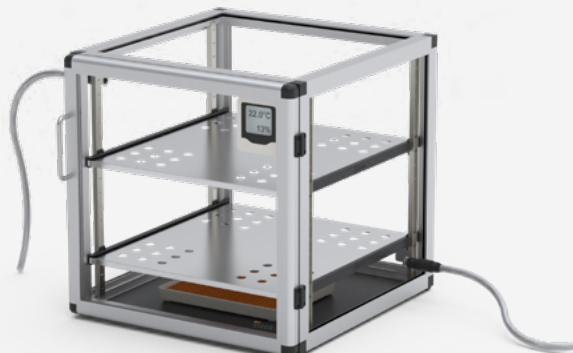
SICCO Super Big Star Desiccator

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
------------------	-------------------	---	-------------------------	----------------------

Product Description:

Aluminium frame with acrylic glass panels, including two stainless steel intermediate shelves, a tray, a hygrometer, and hose (L = 5m) with two quick couplings for gassing can be equipped with up to 8 shelves.

Article No.:	V 1935-07
External Dimensions* W x H x D mm	560 x 560 x 580
Additional space required for coupling mm	150 per side
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	18
Max. Load per Shelf / Total Load kg	30 / 80
Quick coupling – Diameter mm	Ø 6
Panel bores top left and bottom right (mm)	Ø 16,5
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03



*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

SICCO Super Maxi 1 Desiccator

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Casters
------------------	-------------------	---	-------------------------	------------------

Product Description:

Aluminium frame with acrylic glass panels, including four stainless steel intermediate shelves, a tray, a hygrometer, four swivel castors (two with brakes), and hose (L = 5m) with two quick couplings for gassing, can be equipped with up to 17 shelves.

Article No.:	V 1932-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Additional space required for coupling mm	150 per side
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	30
Max. Load per Shelf / Total Load kg	30 / 160
Quick coupling – Diameter mm	Ø 6
Panel bores top left and bottom right (mm)	Ø 16,5
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03



*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Drying Properties



Please see our notes on page 124

SICCO Super Maxi 2 Desiccator

Panels:
Clear

Material:
PMMA

Temperature Resistance:
-20 °C to +70 °C

Use:
Normal Pressure

Base:
Casters

Product Description:

Aluminium frame with acrylic glass panels, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, two hygrometers, four swivel castors (two with brakes), and hose (L = 2x 5m) with four quick couplings for gassing, can be equipped with up to 8 shelves per chamber.

Article No.:	V 1933-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Additional space required for coupling mm	150 per side
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	34
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Quick coupling – Diameter mm	Ø 6 per chamber
Panel bores top left and bottom right (mm)	Ø 16,5
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Fast Drying without Nitrogen

In a SICCO desiccator for gassing, you can also dry your components quickly and cost-effectively by supplying pre-dried air from your compressed air system.



Would You Like to Purge Your Glove Box with Gas in a Controlled Manner and Save Gas in the Process?

With the SICCO Gas Dosing Unit, the gas supply is Auto-matically regulated depending on the humidity. Learn more on page 160.

SICCO Super Desiccator Wall

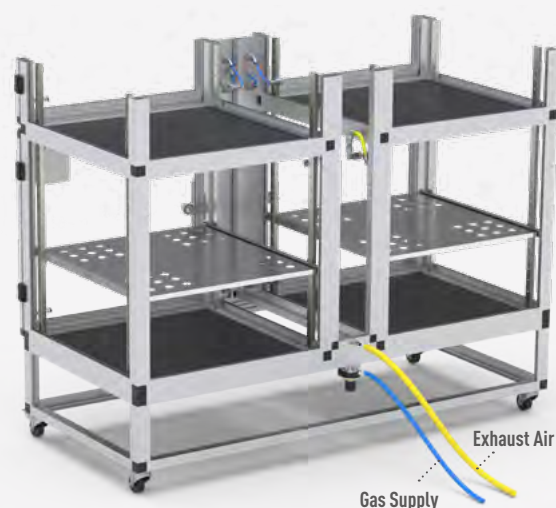
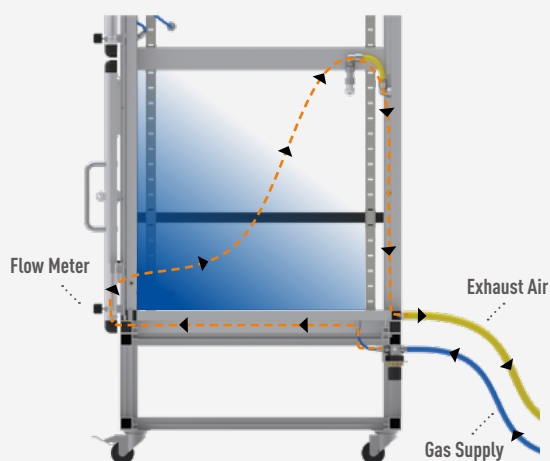
Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Casters
------------------	-------------------	---	-------------------------	------------------

Product Description:

Aluminium frame with acrylic glass panels, six separate chambers and six doors with cylinder lock, including six hygrometers, six trays, and six stainless steel intermediate shelves, can be equipped with up to eight shelves per chamber, four swivel castors (two with brakes). Rear side with central connection for gas inlet and exhaust. The gas is routed into the individual chambers via a piping system; each chamber is equipped with a flow meter for regulating the gas flow, and a backflow preventer on the vent connection of each chamber prevents gas from flowing back into the respective chamber. Hoses for gassing are not included in the scope of delivery.

Article No.:	V 1996-08
External Dimensions* W x H x D mm	1240 x 1866 x 583
Usable Interior Space W x H x D mm	502 x 502 x 502 per chamber
Internal Volume Liters	126 per chamber
Weight kg	86
Max. Load / per Chamber kg	30 / 80
Max. Load kg	200
Ground Clearance to Lower Chamber mm	258
Connection for Gas Supply for exhaust air (hose inner Ø mm)	6
Connection for Exhaust Air for exhaust air (hose inner Ø mm)	9
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



More Accessories

can be found starting
on page 110

SICCO Mini Desiccator Inertgas Basic

Panels:	Material:	Temperature Resistance:	Use:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure

Product Description:

Polycarbonate, with a gassing set (hose 5 m in length and two quick couplings with check valves), one chamber, can be equipped with up to two intermediate shelves, including desiccant, stackable.

Article No.:	V 1849-06
External Dimensions* W x H x D mm	221 x 183 x 214
Additional space required for coupling mm	150
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. load, Evenly Distributed kg	3
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Drying Properties

Please see our notes on page 124



SICCO Mini Desiccator Inertgas Premium

Panels:	Material:	Temperature Resistance:	Use:
Clear	Polycarbonate	-35 °C to +70 °C	Normal Pressure

Product Description:

Polycarbonate, with a gassing set (hose 5 m in length and two quick couplings with check valves), one chamber, including two intermediate shelves—can be equipped with up to two intermediate shelves, hygrometer, desiccant, non-slip feet, stackable.

Article No.:	V 1949-06
External Dimensions* W x H x D mm	221 x 183 x 214
Additional space required for coupling mm	150
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load per Shelf / Total Load kg	2 / 3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Optional Shelves	V 1860-75

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Desiccators with Gassing

In SICCO desiccators, we store electronic components until further processing to protect them from dust and moisture. Purging with nitrogen creates a very dry atmosphere, which prevents damage from oxidation.

Also from Bohlender.

b.safe



Sophisticated Safety Solutions for HPLC.

**Simple. Better. Faster.
Directly from the
Manufacturer.**

When it comes to quality and safety, we leave nothing to chance: We develop, design, and manufacture HPLC solutions ourselves.



Request a catalog now or find information at:
bsafe.de/en or **+49 (0) 93 46-92 86-0**

**bsafe.de/en/
products**

SICCO Automatic Desiccators

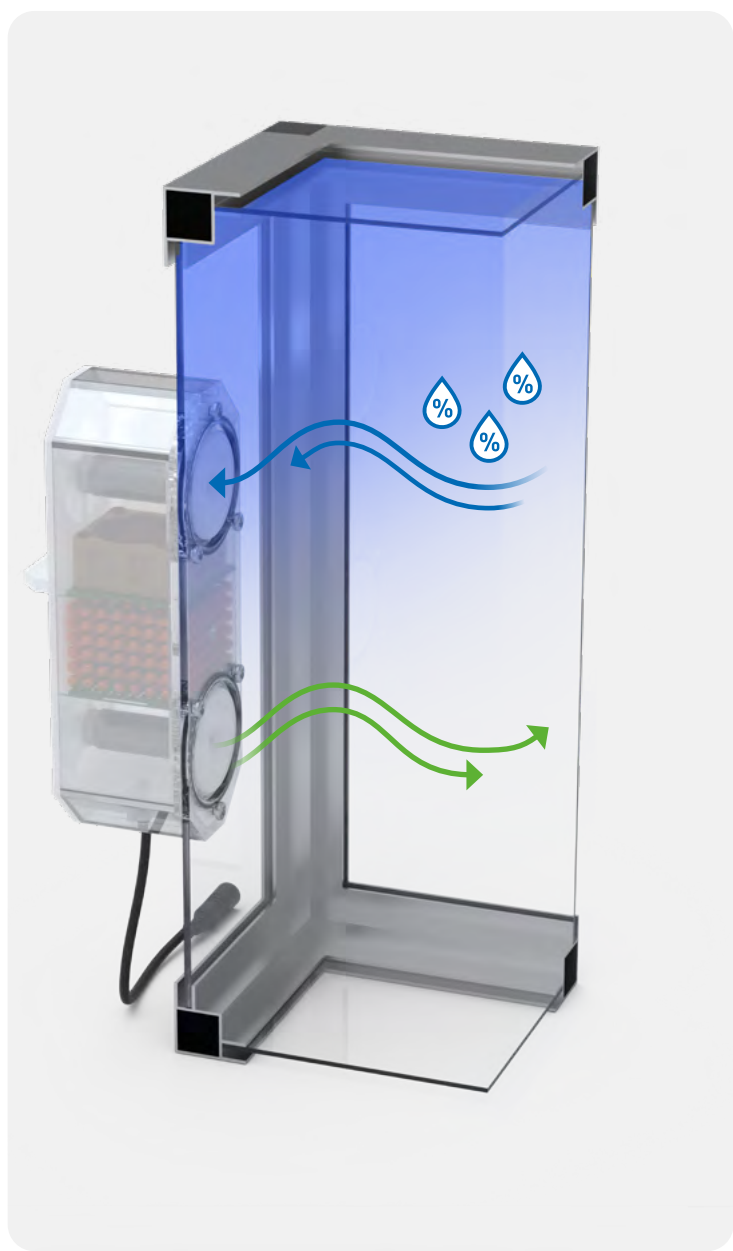
Our automatic Desiccators use an innovative method to permanently reduce humidity in the desiccators. Through our automatic dehumidification system and the silica gel drying beads it contains, moisture can be absorbed from the interior and released back to the outside. In this way, it is possible to achieve an interior humidity of less than 20 %



And This Is How It Works:

Special desiccant pearls absorb the moisture while a fan ensures a constant air flow. In the first part of the approximately 40-minute cycle, the moist air from the desiccator's interior is passed over the desiccant pearls (approx. 30 min.), which absorb the moisture.

In the second part of the cycle (approx. 10 min.), the desiccant pearls are regenerated. For this, they are heated, and the fan now blows the moist, warm air to the outside, subsequently cooling the pearls. Then the cycle starts over.



Electronic Hygrometer

Humidity and Temperature Always in View

Reinforced Aluminum Frame

Durable and Visually Appealing

Extractable and Height-Adjustable Shelves

Easily Accessible and Space-Saving Storage

Automatic Drying

Easy Handling, no need to monitor the desiccant

Panels of a Acrylic or Borosilicate Glass

Visible from all Sides

Door with Magnetic Strip

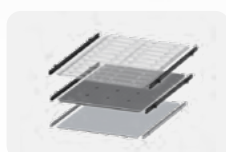
Secure Lock

**Circumferential Rubber Seal**

Prevents the Ingress of Humidity

Constantly low Air humidity

Focus on Your Tasks; Your Samples and Products Are Stored Safely.



By the way! More accessories are available from page 110. Whether it's hygrometers, additional shelves, drip trays, or hoses for gassing. Here you will find everything you need for your desiccator.

SICCO Auto Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with acrylic glass panels, including four polycarbonate intermediate shelves, a hygrometer, and a mounted drying unit, can be equipped with up to 26 shelves, stackable. The automatic drying unit continuously reduces the humidity to below 20 % - no manual exchange of desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 1,5-0,8 A, output: 24 V DC, 2,71 A) with plugs for EU, Australia, USA, Japan, UK and China.

Article No.:	V 1877-07
External Dimensions* W x H x D mm	310 x 525 x 375
Drying unit overhang mm	65 rear side
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7,3
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	11,5
Additional Shelves incl. guide rail	V 1860-68

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties

Please see our notes on page 124



Do You Need Additional space in Your Desiccator?

We have the solution: All desiccators can be equipped with additional, extractable shelves. Learn more on page 112

SICCO Auto Star Desiccator Vitrum

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	Borosilicate 3.3	-20 °C to +150 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminium frame with heat-resistant borosilicate glass 3.3 panels, aluminium back panel, including four stainless steel intermediate shelves, a hygrometer, and a mounted drying unit, can be equipped with up to 26 shelves, stackable. The automatic drying unit continuously reduces the humidity to below 20 % - no manual exchange of desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 1,5-0,8 A, output: 24 V DC, 2,71 A) with plugs for EU, Australia, USA, Japan, UK and China.



Article No.:	V 1823-07
External Dimensions* W x H x D mm	310 x 525 x 375
Drying unit overhang mm	65 rear side
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	13,5
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	15,5
Additional Shelves incl. guide rail	V 1860-52

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Applications:

Direct storage for long-term preservation of hot materials (max. 120 °C) pre-dried in the oven. The compatibility must be checked when storing aggressive products.



SICCO Auto Big Star Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

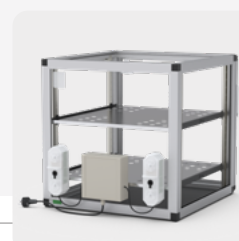


Product Description:

Aluminium frame with acrylic glass panels, including two stainless steel intermediate shelves, a hygrometer, and a mounted drying unit, can be equipped with up to 8 shelves. The automatic drying unit continuously reduces the humidity to below 20 % - no manual exchange of desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 3 A Max., output: 24 V DC, 8,5 A or Input: AC 200-240 V/50-60 Hz, 3 A Max., Output: 24 V DC, 10 A) with plug for EU.

Article No.:	V 1894-07
External Dimensions* W x H x D mm	560 x 560 x 580
Drying unit overhang mm	65 rear side
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	22
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Control Desiccators

NEW

Our Control Desiccators are using an innovative method to permanently maintain the humidity in the desiccators at an adjustable value (15% to 95% r.h.). With our automatic Control-Unit and the silica gel contained therein, the target humidity is achieved with a tolerance of approx. $\pm 5\%$.

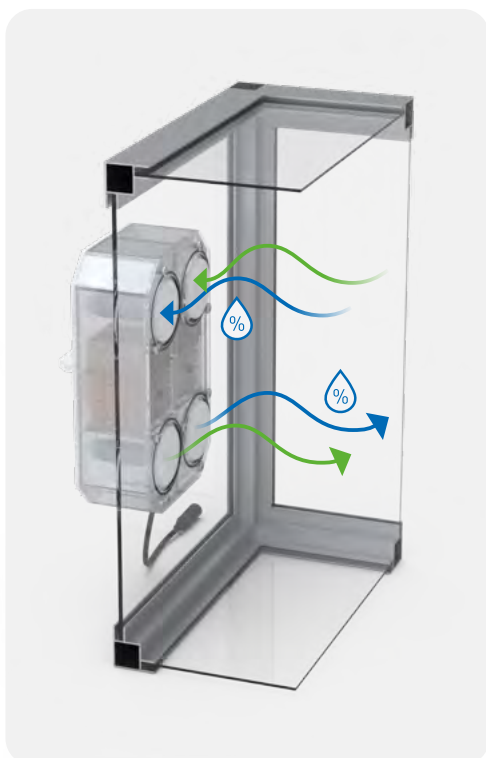


And This Is How It Works:

Special desiccant pearls absorb the moisture from the interior and release it to the ambient air.

Conversely, the humidity is drawn from the ambient air by the desiccant pearls and supplied to the interior.

The process is supported by heating the desiccant pearls and a small fan.



Highlights:

- ✓ No external water supply needed
- ✓ Dehumidifying or humidifying with one device
- ✓ Fixed humidity value adjustable
- ✓ Minimum air humidity of 15 % r.h.
- ✓ Maximum air humidity of 95 % r.h.
- ✓ Dehumidification/Drying performance in 24 h:
Control Star Desiccator: ca. 70 g
Control Big Star Desiccator: ca. 110 g
Control Maxi 2 Desiccator (per chamber): ca. 110 g
- ✓ Humidification performance in 24 h:
Control Star Desiccator: ca. 30 g
Control Big Star Desiccator: ca. 80 g
Control Maxi 2 Desiccator (per chamber): ca. 80 g

SICCO Control Desiccators

Panels: Clear Material: PMMA Temperature Resistance: -20 °C to +70 °C Use: Normal Pressure Base: Rubber Feet

NEW
CE

Product Description:

Aluminum frame with acrylic glass panels, including shelves (Control-Star Desiccator: four shelves made of Polycarbonate; Control-Big Star and Maxi 2 Desiccator: two shelves made of stainless steel per chamber), can be equipped with up to 26 shelves for the Control-Star Desiccator and 8 shelves per chamber for the Control-Big Star and Maxi 2 Desiccator, stackable, the Control-Star and the Control-Big Star are delivered with rubber feet, the Maxi 2 Desiccator with casters. The automatic Control-Unit continuously reduces or increases the air humidity to the digitally set target value - adjustable from 15 % to 95 % r.h.. No manual adding or draining of water is necessary. The display shows the temperature, the current operating status (Dehumidifying / Humidifying), as well as the target value and current actual value of the air humidity. Including power supply for Control Big Star Desiccator and Control Maxi 2 Desiccator (input: AC 100-240 V/50-60 Hz, 3,5 A Max., output: 24 V DC, 10 A) with plug for EU or Including power supply for Control Star Desiccator (input: AC 100-240 V/50-60 Hz, 2 A Max., output: 24 V DC, 5 A) with plug for EU.



Article	Control Star Desiccator (1) V 1677-07	Control Big Star Desiccator (2) V 1679-07	Control Maxi 2 Desiccator (3) V 1682-07
External Dimensions* B x H x T mm	310 x 525 x 375	560 x 560 x 580	560 x 1150 x 580
Control Unit Overhang mm	60 rear	60 rear	60 rear
Usable Interior Space B x H x T mm	260 x 480 x 330	495 x 500 x 540	495 x 500 x 540 per chamber
Internal Volume Liter	51	156	156 per chamber
Weight kg	7,3	23	36
Max. Load per Shelf / Total Load kg	10 / 30	30 / 80	30 / 80 per chamber
Usable Area per Shelf mm	245 x 320	479 x 515	479 x 515
Minimum Shelf Spacing mm	11,5	39	39
Additional Shelves incl. guide rails	V 1860-68	V 1860-03	V 1860-03

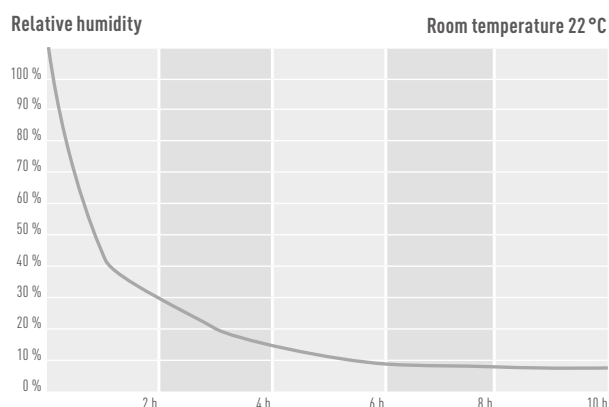
*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

2

3


Control Star, Control Big Star and Control Maxi 2 Desiccators

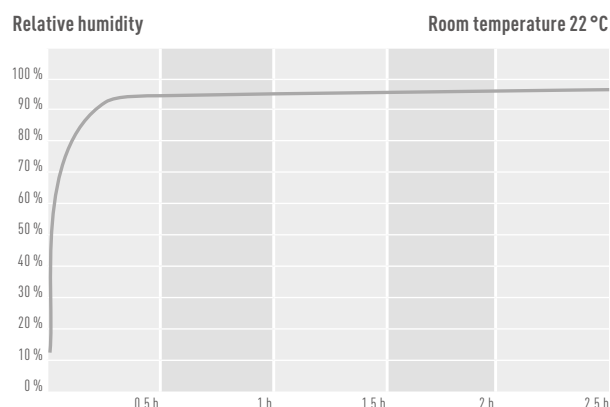
Minimum humidity



Relative humidity of under 15% after a good 4 hours

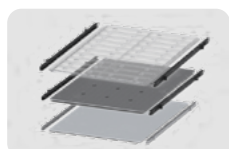
Drying performance approx. 70 g / 24 h

Maximum humidity



Relative humidity of under 95% after 2 hours

Humidification performance approx. 30 g / 24 h



By the way! More accessories are available from page 110. Whether shelves, for your desiccator, hygrometer or drip trays. Here you will get everything you need for your professional work.

SICCO Auto Maxi 1 Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +120 °C	Normal Pressure	Casters



Product Description:

Aluminum frame with acrylic glass panes, including four stainless steel intermediate shelves, hygrometer, four swivel casters (two of which have brakes), and a mounted drying unit, can be fitted with up to 17 shelves. The automatic drying unit continuously reduces humidity to below 20 % – no manual replacement of the desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 3 A Max., output: 24 V DC, 8,5 A or Input: AC 200-240 V/50-60 Hz, 3 A Max., Output: 24 V DC, 10 A) with plug for EU.

Article No.:	V 1914-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Drying unit overhang mm	65 rear
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	31
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Drying Properties

Please see our notes on page 124

SICCO Auto Maxi 2 Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Casters



Product Description:

Aluminum frame with acrylic glass panes, two separate chambers and two doors, including four stainless steel intermediate shelves, two hygrometers, four swivel casters (two of which have brakes), and a mounted drying unit. Can be fitted with up to 8 shelves per chamber. The automatic drying unit continuously reduces humidity to below 20 % – no manual replacement of the desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 3 A Max., output: 24 V DC, 8,5 A or Input: AC 200-240 V/50-60 Hz, 3 A Max., Output: 24 V DC, 10 A) with plug for EU.

Article No.:	V 1916-01
External Dimensions* W x H x D mm	560 x 1150 x 580
Drying unit overhang mm	65 rear
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	35
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



How Do You Clean the Panels Correctly?

With a soft cloth and a standard household glass cleaner, you are on the safe side. Do not use any solvent-based cleaners that contain alcohols. More on page 151.

More Accessories

can be found starting on page 110

SICCO Auto Desiccator Wall

Panels: Clear	Material: PMMA	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Casters
------------------	-------------------	---	-------------------------	------------------



Product Description:

Aluminum frame with acrylic glass panes, six separate chambers and six doors, including six stainless steel intermediate shelves, six hygrometers, and a mounted drying unit. It features four swivel casters (two of which have brakes), and can be fitted with up to 8 shelves per chamber. The automatic drying unit continuously reduces humidity to below 20 % – no manual replacement of the desiccant is necessary. Including power supply (input: AC 100-240 V/50-60 Hz, 3 A Max., output: 24 V DC, 8,5 A or Input: AC 200-240 V/50-60 Hz, 3 A Max., Output: 24 V DC, 10 A) with plug for EU.

Article No.:	V 1995-08
External Dimensions* W x H x D mm	1080 x 1870 x 580
Drying unit overhang mm	65 rear
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	100
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Max. Load kg	200
Ground clearance to lower chamber mm	240
Number of drying units	2 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-03

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



How Do You Accelerate the Drying Process?

By increasing the air circulation in the interior, for example with a small fan, you improve the air quality and ensure a more pleasant ambient temperature. More on page 156.

SICCO Antistatic Desiccators

SICCO Antistatic Desiccators reliably protect electronic components from humidity and particles from the ambient air. By eliminating electrostatic charges with a grounding cable, a voltage-free atmosphere is created inside. Antistatic desiccators are often used for the temporary storage of components during the manufacturing of electronic products.



And This Is How It Works:

A grounding cable is connected to the designated port on the back of the desiccator. The materials used for the desiccator are consistently dissipative; through grounding, any potential static charges are immediately discharged. In this way, electronic components in particular can be protected inside the desiccator not only from moisture and dust but also from damage by electrostatic discharge.



Protection from Electrostatic Discharge

By grounding the desiccator, static charges that could damage sensitive electronic components are prevented.





By the way! More accessories are available from page [110](#). Whether it's shelves, hygrometers, connectors, or drip trays. Here you will get everything you need for your desiccator.

SICCO Star Desiccator Antistatic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Bluish	PC-ESD	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminum frame with conductive polycarbonate panes, including four aluminum intermediate shelves, tray, hygrometer, and desiccant. Can be fitted with up to 26 shelves, and is stackable. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1910-07
External Dimensions* W x H x D mm	310 x 525 x 375
Usable Interior Space W x H x D mm	260 x 480 x 330
Internal Volume Liters	51
Weight kg	7
Max. Load per Shelf / Total Load kg	10 / 30
Usable Area per Shelf mm	245 x 320
Minimum Shelf Spacing mm	15,5
Additional Shelves incl. guide rail	V 1860-55

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Big Star Desiccator Antistatic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Bluish	PC-ESD	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminum frame with conductive polycarbonate panes, including two stainless steel intermediate shelves, a tray, and a hygrometer. Can be fitted with up to 17 shelves. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1925-07
External Dimensions* W x H x D mm	560 x 560 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540
Internal Volume Liters	156
Weight kg	18
Max. Load per Shelf / Total Load kg	30 / 80
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



Space Problems?

With the wall mount, you can install our desiccators directly on the wall and make better use of your work surfaces. More on page 151.

More Accessories

can be found starting on page 110



SICCO Maxi 1 Desiccator Antistatic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Bluish	PC-ESD	-20 °C to +70 °C	Normal Pressure	Casters



Product Description:

Aluminum frame with conductive polycarbonate panes, including four stainless steel intermediate shelves, tray, and hygrometer. It features four swivel casters (two of which have brakes) with a conductive tread. Can be fitted with up to 34 shelves. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1922-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 1030 x 540
Internal Volume Liters	311
Weight kg	30
Max. Load per Shelf / Total Load kg	30 / 160
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	39
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Maxi 2 Desiccator Antistatic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Bluish	PC-ESD	-20 °C to +70 °C	Normal Pressure	Casters



Product Description:

Aluminum frame with conductive polycarbonate panes, two separate chambers and two doors, including four stainless steel intermediate shelves, two trays, and two hygrometers. It features four swivel casters (two of which have brakes) with a conductive tread, and can be fitted with up to 17 shelves per chamber. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1923-07
External Dimensions* W x H x D mm	560 x 1150 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	34
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Drying Properties

Please see our notes on page 124



SICCO Mini Desiccator Antistatic Basic

Panels: **Black** Material: **PC-ESD** Temperature Resistance: **-35 °C to +70 °C** Use: **Normal Pressure**



Product Description:
Black, static-dissipative polycarbonate. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (Bore diameter 4.3 mm). It features one chamber, can be fitted with up to two intermediate shelves, includes desiccant, and is stackable.

Article No.:	V 1843-06
External Dimensions* W x H x D mm	221 x 182 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load, Evenly Distributed kg	3
Surface resistance Ohm	10 ⁵
Additional Shelves	V 1860-77

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Mini-Desiccator Antistatic Premium

Panels: **Black** Material: **PC-ESD** Temperature Resistance: **-35 °C to +70 °C** Use: **Normal Pressure**



Product Description:
black, static-dissipative polycarbonate, all materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (bore Ø 4.3 mm), one chamber, including two intermediate shelves, can be equipped with up to two intermediate shelves, desiccant, stackable.

Article No.:	V 1943-06
External Dimensions* W x H x D mm	221 x 182 x 214
Usable Interior Space W x H x D mm	196 x 156 x 181
Internal Volume Liters	6,2
Weight kg	0,9
Max. Load, Evenly Distributed kg	2/3
Usable Area per Shelf mm	208 x 178
Minimum Shelf Spacing mm	50
Surface Resistance Ohm	10 ⁵
Additional Shelves	V 1860-77

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



SICCO Desiccator Wall Antistatic

Panels: **Bluish** Material: **PC-ESD** Temperature Resistance: **-20 °C to +70 °C** Use: **Normal Pressure** Base: **Casters**



Product Description:

Aluminum frame with conductive polycarbonate panes, six separate chambers and six doors, including six stainless steel intermediate shelves, six trays, and six hygrometers. It features four swivel casters (two of which have brakes) with a conductive tread, and can be fitted with up to 17 shelves per chamber. All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1997-08
External Dimensions* W x H x D mm	1080 x 1870 x 580
Usable Interior Space W x H x D mm	495 x 500 x 540 per chamber
Internal Volume Liters	156 per chamber
Weight kg	100
Max. Load per Shelf / Total Load kg	30 / 80 per chamber
Max. Load kg	200
Ground clearance to lower chamber mm	240
Usable Area per Shelf mm	479 x 515
Minimum Shelf Spacing mm	17
Additional Shelves incl. guide rail	V 1860-02

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.



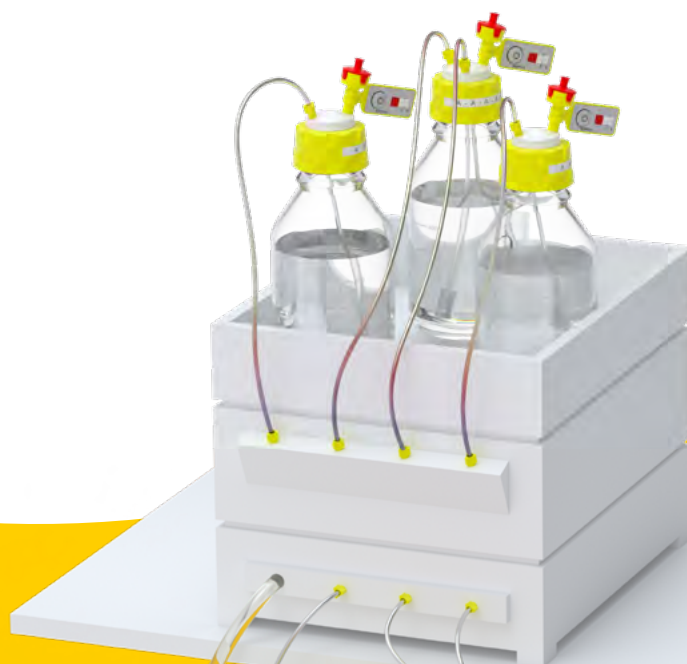
How Can You Reduce Air Exchange When Opening the Door?

Create an artificial wall by placing large vessels at the front or by covering the gaps with paper or foil. More on page 157.



Also from Bohlender.

b.safe



Sophisticated Safety Solutions for HPLC.

**Simple. Better. Faster.
Directly from the
Manufacturer.**

When it comes to quality and safety, we leave nothing to chance: We develop, design, and manufacture HPLC solutions ourselves.



Request a catalog now or find information at:
bsafe.de or +49 (0) 93 46-92 86-0

**bsafe.de/en/
products**

Also from Bohlender.

b.safe SYSTEM

Individual Installation Systems for Safe Solvent Disposal and Waste Management in the Laboratory.



[bsafe.de/en
system](https://bsafe.de/en/system)

SICCO Vacuum Desiccators

SICCO Vacuum Desiccators are used for storing sensitive products in a near-vacuum. The vacuum created inside dries the stored products particularly quickly. The systems allow for oxygen- and carbon dioxide-free storage, making them suitable, for example, for the contamination-free storage of semiconductor samples.



Caution, Proper Venting!

A common mistake is to retighten the latches after evacuation to seemingly seal them perfectly. However, when venting the desiccator, it is essential to ensure that the levers are returned to their original position before venting, as they can break under pressure.



And This is How it Works:

In our vacuum desiccators, air is extracted through one of the valves by a vacuum pump, creating a negative pressure of about 1 bar in a short time. When the valve is opened, air can flow back into the desiccator.



**Extractable
Shelves**

Easily Accessible
and Space-Saving
Storage

**Panels Made of
Plexiglas**

Thick Walls for
High Pressure
Resistance

**Vacuum Gauge
-1.0 - 0 bar**

Versatile
and Precise
Measurement
in the Lab

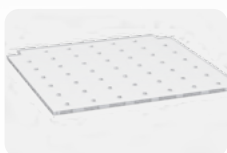
**Circumferential
Silicone Seal**

Constantly Low
Humidity

**Needle Valves
With Olive Fittings on
the Outside Ø 9.0 mm**

**Non-slip
Rubber Feet**

For a Secure Stand



Also check from page 110 for additional accessories
like shelves or silica gel, which will help you make the best
use of your desiccator.

SICCO Vacuum 1 Desiccator

Panels: Crystal clear Material: PMMA Temperature Resistance: -20 °C to +70 °C Use: Vacuum to 0.2 mbar Base: Rubber Feet



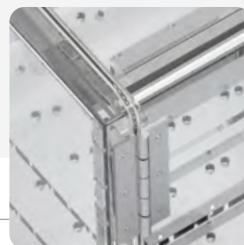
Product Description:

Solid acrylic glass (wall thickness 20 mm), door with circumferential silicone seal and four locking latches, one Vacuum Gauge, two needle valves with olives (Outer Ø 9 mm), including two acrylic intermediate shelves, can be fitted with up to three shelves.

Article No.:	V 1880-04
External Dimensions* W x H x D mm	300 x 340 x 300
Overhang of Valves + Vacuum Gauge mm	100
Usable Interior Space B x H x T mm	260 x 260 x 260
Internal Volume Liters, approx.	18
Weight kg, approx.	15
Max. Load per Shelf / Total Load kg	9 / 30
Usable Area per Shelf mm	260 x 230
Minimum Shelf Spacing mm	60
Optional Shelves	V 1860-30

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Technical Data	Vacuum Gauge
Version	EN 837-1
Nominal Size mm	63
Accuracy	Class 2,5 ($\pm 2,5\%$)
Display Range in bar	-1,0 to 0
Scale Division	0,05



Vacuum Desiccators

With the help of SICCO Vacuum Desiccators, we can evacuate our samples and remove water or volatile solvents. Contamination in subsequent analytical investigations can be avoided and results can be determined correctly.

SICCO Vacuum 2 Desiccator

Panels:	Material:	Temperature Resistance:	Use:	Base:
Crystal clear	PMMA	-20 °C to +70 °C	Vacuum to 0.2 mbar	Rubber Feet

Product Description:

Solid acrylic glass (wall thickness 20 mm), door with circumferential silicone seal and four locking latches, one Vacuum Gauge, two needle valves with olives, (Outer Ø 9 mm) including three acrylic intermediate shelves, can be fitted with up to 5 shelves.

Article No.:	V 1880-08
External Dimensions* W x H x D mm	300 x 440 x 300
Overhang of Valves + Vacuum Gauge mm	100
Usable Interior Space W x H x D mm	260 x 360 x 260
Internal Volume Liters, approx.	25
Weight kg, approx.	18
Max. Load per Shelf / Total Load kg	9 / 40
Usable Area per Shelf mm	260 x 230
Minimum Shelf Spacing mm	60
Optional Shelves	V 1860-30

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Technical Data	Vacuum Gauge
Version	EN 837-1
Nominal Size mm	63
Accuracy	Class 2,5 (±2,5 %)
Display Range in bar	-1,0 to 0
Scale Division	0,05



Do You Want to Know Which Vacuum Pump is Best Suited for your Vacuum Desiccator?

Our recommendation: The diaphragm pump MD1 from Vacuu-brand. It ensures contamination-free pumping and evacuation. You can find more information visit: vacuubrand.com

SICCO Vacuum 3 Desiccator

Panels:
Crystal clear

Material:
PMMA

Temperature Resistance:
-20 °C to +70 °C

Use:
Vacuum to 0.2 mbar

Base:
Rubber Feet

Product Description:

Solid acrylic glass (wall thickness 25 mm), door with circumferential silicone seal and five locking latches, one Vacuum Gauge, two needle valves with olives (Outer Ø 9 mm), including four acrylic intermediate shelves, can be fitted with up to 7 shelves.

Article No.:	V 1880-12
External Dimensions* W x H x D mm	315 x 550 x 310
Overhang of Valves + Vacuum Gauge mm	100
Usable Interior Space W x H x D mm	265 x 460 x 260
Internal Volume Liters, approx.	32
Weight kg, approx.	27
Max. Load per Shelf / Total Load kg	9 / 50
Usable Area per Shelf mm	260 x 230
Minimum Shelf Spacing mm	55
Optional Shelves	V 1860-30

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Technical Data	Vacuum Gauge
Version	EN 837-1
Nominal Size mm	63
Accuracy	Class 2,5 (±2,5 %)
Display Range in bar	-1,0 to 0
Scale Division	0,05

More Accessories

can be found starting
on page 110



SICCO Vacuum Desiccator Toploader

Panels:	Material:	Temperature Resistance:	Use:	Base:
Crystal clear	PMMA	-20 °C to +70 °C	Vacuum to 0.2 mbar	Rubber Feet

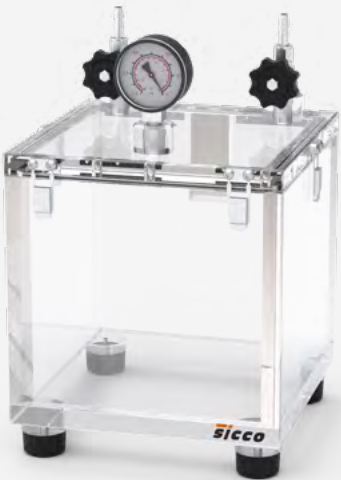
Product Description:

Solid acrylic glass (wall thickness 20 mm), top-loading design, rear-hinged lid with a circumferential silicone seal and four closure clamps. One Vacuum Gauge and two needle valves with olives (Outer Ø 9 mm) integrated into the hinged lid.

Article No.:	V 1882-02
External Dimensions* W x H x D mm	250 x 250 x 250
Usable Interior Space W x H x D mm	210 x 210 x 210
Internal Volume Liters, approx.	9
Weight kg, approx.	9
Total Load, Evenly Distributed kg	30
Usable Area per Shelf mm	210 x 210

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 146.

Technical Data	Vacuum Gauge
Version	EN 837-1
Nominal Size mm	63
Accuracy	Class 2,5 (±2,5 %)
Display Range in bar	-1,0 to 0
Scale Division	0,05



SICCO Glove Boxes and Exhaust Hoods

Our SICCO Glove Boxes are the ideal solution for environments where sensitive or hazardous substance mixtures must be handled or processed. The outstanding advantage is the large working space door, which allows all necessary equipment such as scales, syringes, pipettes, and more to be easily brought in and installed before starting work. This user-friendly functionality significantly facilitates the workflow and optimizes efficiency in demanding application areas.



Ergonomic Work

SICCO Glove Boxes are specially designed to create an ergonomic working environment. The port openings are designed so that you can work in a back-friendly posture while having enough space for your work.

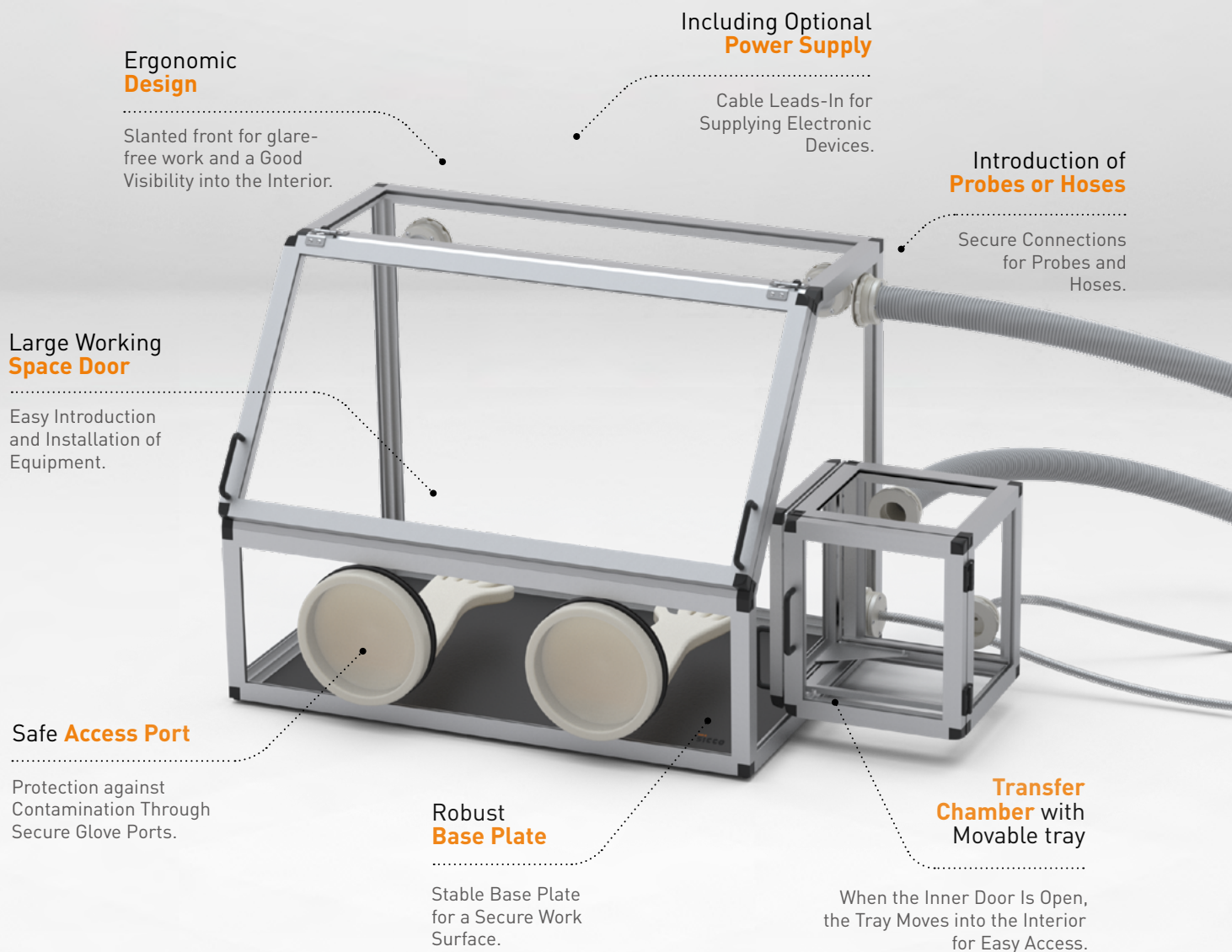


Safe Working with Glove Boxes

SICCO Glove Boxes provide you with the necessary protection from potentially hazardous substances and prevent contamination of the environment.



SICCO Glove Boxes offer safe handling of sensitive material mixtures in an isolated atmosphere. Robust natural rubber gloves ensure mobility and secure handling. Gassing ports enable work in an atmosphere blanketed with nitrogen or inert gas. The airlock allows for convenient loading of the glove box.



By the way! More accessories are available from page [110](#). Whether it's gloves, additional protective trays, cable leads-ins, or connections for gassing. Here you will get everything you need for your glove box.

SICCO Glove Box with Transfer Chamber

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



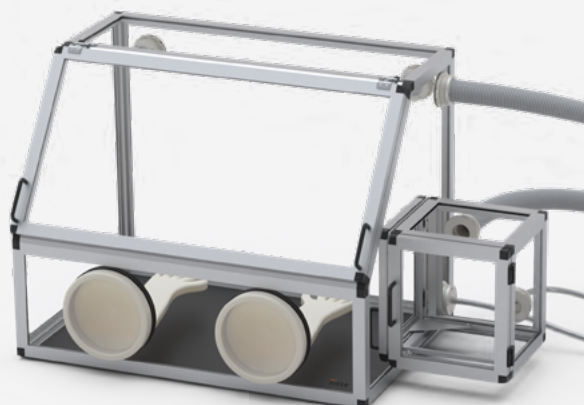
Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features two access ports and one pair of size 9 natural rubber gloves, plus two leads-in on the rear side (top right / top left). The transfer chamber features two doors, with the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chamber each include two hose connections for gassing and ventilation as well as matching hoses (2 x 5 m PVC gassing hose and 2 x 5 m PE ventilation hose).

Article No.:	V 1982-08
Overall External Dimensions * W x H x D mm	1180 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters	290
Total Weight kg, approx.	20
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



Need Replacement Gloves or Different Sizes?

All info on page 162



Would You Like to Purge Your Glove Box with Gas in a Controlled Manner and Save Gas in the Process?

With the SICCO Gas Dosing Unit, the gas supply is automatically regulated depending on the humidity. Learn more on pages 101 and 160.

SICCO **Glove Box Vitrum with Transfer Chamber**

Panels: **Clear** Material: **Borosilicate 3.3** Temperature Resistance: **-20 °C to +120 °C** Use: **Normal Pressure** Base: **Rubber Feet**



Product Description:

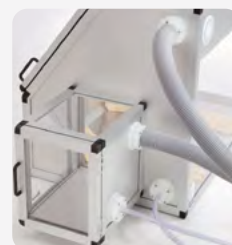
Aluminum frame with heat-resistant borosilicate glass 3.3 panes, front side with access ports, right side wall and bottom made of aluminum, base in the working area made of stainless steel, one pair of size 9 natural rubber gloves, two leads-in on the rear side (top right / top left). Transfer chamber with two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chamber each include two hose connections for gassing and ventilation as well as matching hoses (2 x 5 m PVC gassing hose and 2 x 5 m PE ventilation hose).

Article No.:	V 1986-08
Overall External Dimensions* W x H x D mm	1180 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters	290
Total Weight kg, approx.	36
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liter, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Interior made of chemically highly resistant materials (aluminum, stainless steel, borosilicate glass) for working with aggressive products.



**Need Replacement
Gloves or Different Sizes?**

All info on page [162](#)



*External dimensions are frame dimensions without attached parts, measured from base. Details on page [149](#).



Space-Saving Set-Up - Fits in Any Gap. Transfer Chambers with Front-Opening Doors

The front-opening transfer chamber door allows you to place the glove box directly against a wall or in a corner. This enables optimal use of the available space. More on usable and placement area from page [149](#).

SICCO Glove Box

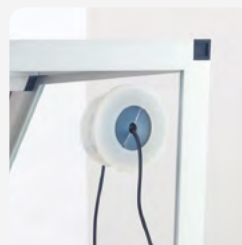
Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features two access ports and one pair of size 9 natural rubber gloves, plus two leads-in on the rear side (top right / top left). The working area includes two hose connections for gassing and ventilation as well as matching hoses (1 x 5 m PVC gassing hose and 1 x 5 m PE ventilation hose).

Article No.:	V 1984-08
External Dimensions* W x H x D mm	890 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters	290
Weight kg, approx.	14
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



Glove Boxes

With a frame made of aluminum profiles and corner connectors made of glass-fiber reinforced plastic, SICCO Glove Boxes are particularly stable - ideal for a long service life.



Need Replacement Gloves or Different Sizes?

All info on page 162



SICCO Iris Ports

The SICCO Iris Ports are not only easy to install, but also save time and money. They allow you to continue working without having to take off your laboratory gloves. More on page 164.



SICCO **Glove Box with Transfer Chamber Antistatic**

Panels: **Bluish** Material: **PC-ESD** Temperature Resistance: **-20 °C to +70 °C** Use: **Normal Pressure** Base: **Rubber Feet**



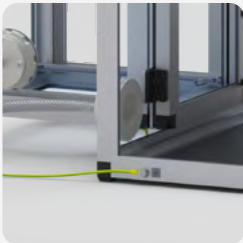
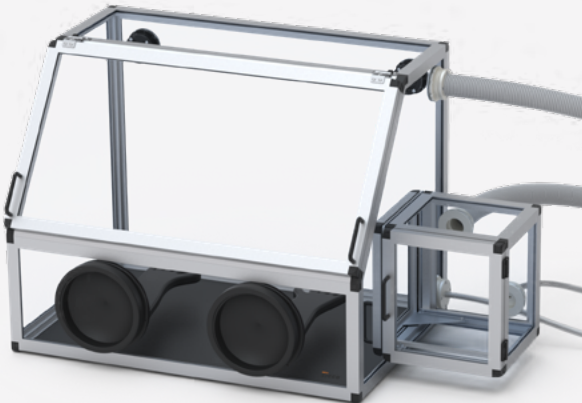
Product Description:

Aluminum frame with conductive polycarbonate panes, base made of conductive polyethylene. The front side features two access ports and one pair of size 9.75 gloves made of conductive EPDM, plus two leads-in on the rear side (top right / top left). The transfer chamber features two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chamber each include two hose connections for gassing and ventilation as well as matching hoses (2 x 5 m PVC gassing hose and 2 x 5 m PE ventilation hose). All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).

Article No.:	V 1992-08
Overall External Dimensions * W x H x D mm	1180 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters	290
Total Weight kg, approx.	20
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**
All info on page [163](#)



Closing Lid for Port Opening

During a longer period of inactivity or for cleaning the gloves, the port openings can be sealed dust-tight. Learn more on page [164](#).

SICCO Glove Box for Extraction

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Aluminum frame with acrylic glass panes. The base, integrated connection port for exhaust air, and closure lid are made of polyethylene. Iris port access and leads-in are made of polyethylene and silicone. The two leads-in are located on the rear side (top right / top left).

In each access port and in each leads-in there are two cross-slotted silicone discs. These are staggered so that the overlapping segments close the access when not in use, yet the interior remains easily accessible. When the exhaust system is switched on, these connections also ensure pressure equalization through inflowing air. Connection to the exhaust system is via the integrated port on the top side. This port is stepped and suitable for pipes with an inner diameter of 100, 120, 160 and 180 mm. When working without an exhaust system, the passage can simply be closed with a lid.



Article No.:	V 1988-08
Overall External Dimensions * W x H x D mm	890 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters	290
Total Weight kg, approx.	16
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 170
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Connection Ø mm, graduated	100, 120, 160, 180

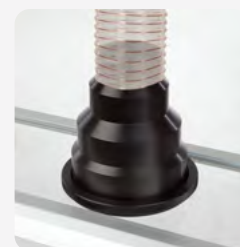
Applications:

Direct connection to an existing exhaust system is possible via the integrated connection port. Easy access to the interior is gained via the iris ports, eliminating complicated glove replacement.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.

More Accessories

can be found starting
on page 110



SICCO Cable Leads-In

Take advantage of our innovative solution: With the Cable leads-in specially developed by SICCO for glove boxes, you can now operate electronic devices safely and reliably inside the glove box. More on page 158.

SICCO **Glove Box Trio with Transfer Chamber**

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features three access ports and two pairs of size 9 natural rubber gloves, plus three leads-in on the rear side (top right / middle / top left). The transfer chamber (right side) features two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chamber each include two hose connections for gassing and ventilation as well as matching hoses (2 x 5 m PVC gassing hose and 2 x 5 m PE ventilation hose).

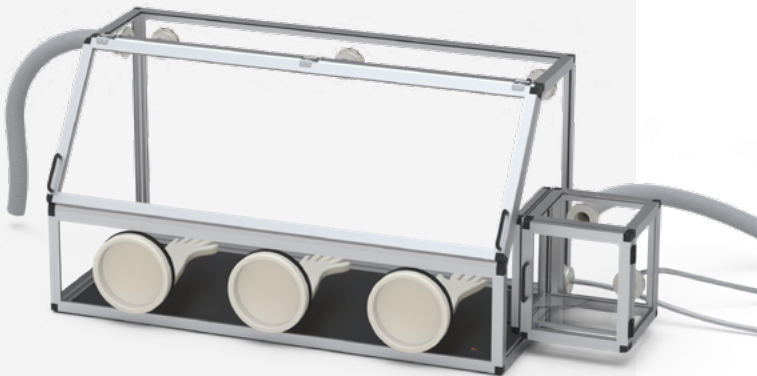
Article No.:	V 1750-08
Overall External Dimensions * W x H x D mm	1570 x 690 x 590
Usable Interior Space W x H x D mm	1240 x 650 x 550
Internal Volume Liters	440
Total Weight kg, ca	28
Max. Load, Evenly Distributed kg, approx.	60
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	1240 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Generous interior with a large door opening. The necessary devices for carrying out several working steps in sequence can be installed inside one glove box. Flexible equipping of the third access port; a second pair of gloves is already included in the scope of delivery.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page 162

More Accessories

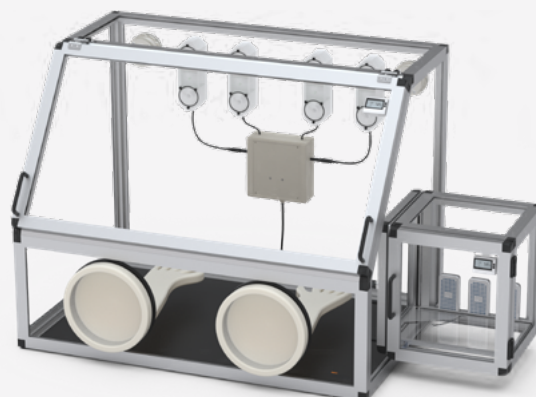
can be found starting
on page 110

SICCO Auto Glove Box with Transfer Chamber

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features two access ports with one pair of size 9 natural rubber gloves. The rear side has two leads-in (top right / top left). One hygrometer is included in both the working area and the transfer chamber. The transfer chamber (right side) features two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. Automatic humidity reduction in the working area and transfer chamber to below 20 % is achieved by automatic drying units mounted on the rear side of the working area and desiccant cassettes in the outer wall of the transfer chamber. The desiccant cassettes can be replaced for regeneration when the silica gel is saturated. A 230 V/50 Hz power connection is required.



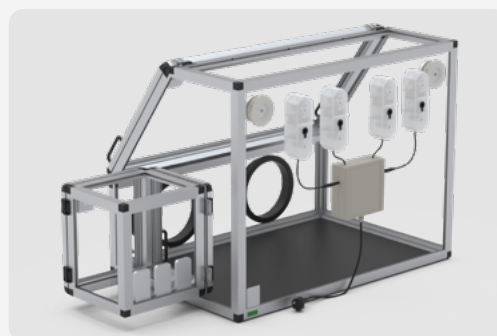
Article No.:	V 1755-08
Overall External Dimensions * W x H x D mm	1180 x 690 x 590
Usable Interior Space W x H x D mm	850 x 650 x 550
Drying Unit Overhang mm	65 rear side
Internal Volume Liters	290
Total Weight kg, ca	53
Max. Load, Evenly Distributed kg, approx.	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

For the processing and handling of moisture-sensitive substances in a dry atmosphere. Additional desiccant cassettes for the transfer chamber are available separately (see Article No.: V 1901-04).

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page [162](#)

More Accessories

can be found starting
on page [110](#)

Drying Properties

Please see our notes on
page [124](#)

Also from Bohlender



Professional Laboratory Equipment Made of High- Performance Plastics

PTFE | PFA | FEP

Stirrer shafts, magnetic stirring bars or tubing. These are three of over 1,000 innovative BOLA products made of high-performance plastics. For fast, precise, and safe work in the laboratory.

Request a catalog now or find information at:
bola.de or **+49 (0) 93 46-92 86-0**



**bola.de/en/
products**

A BRAND OF BOHLENDER

SICCO Glove Box Duo 1 with Transfer Chamber

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features four access ports and two pairs of size 9 natural rubber gloves, plus three leads-in on the rear side (top right / middle / top left). Two transfer chambers (right and left) each feature two doors. The outer doors have a latch to prevent accidental opening, and the tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chambers each include two hose connections for gassing and ventilation as well as matching hoses (3 x 5 m PVC gassing hose and 3 x 5 m PE ventilation hose).

Article No.:	V 1730-08
Overall External Dimensions * W x H x D mm	2300 x 690 x 590
Usable Interior Space W x H x D mm	1680 x 650 x 550
Internal Volume Liters	600
Total Weight kg, approx.	40
Max. Load, Evenly Distributed kg, approx.	80
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	1680 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 mL laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Generous interior with a large door opening. The necessary devices can also be installed inside one glove box to set up two workstations and carry out several working steps sequentially. The position of the access ports allows for easy transfer of working materials from transfer chamber to transfer chamber.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page 162

How Do You Clean the Panels Correctly?

With a soft cloth and a standard household glass cleaner, you are on the safe side. Do not use any solvent-based cleaners containing alcohols. More on page 151.

Drying Properties

Please see our notes on page 134

SICCO **Glove Box Duo 2 with Transfer Chamber**

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features four access ports and two pairs of size 9 natural rubber gloves, plus three leads-in on the rear side (top right / middle / top left). Two transfer chambers (right and left) each feature two doors. The outer doors have a latch to prevent accidental opening, and the tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chambers each include two hose connections for gassing and ventilation as well as matching hoses (3 x 5 m PVC gassing hose and 3 x 5 m PE ventilation hose).

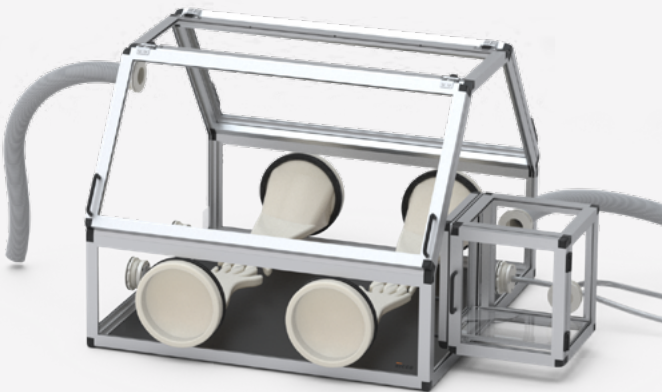
Article No.:	V 1710-08
Overall External Dimensions * W x H x D mm	1180 x 690 x 886
Usable Interior Space W x H x D mm	850 x 650 x 846
Internal Volume Liters	475
Total Weight kg, approx.	30
Max. Load, Evenly Distributed kg, approx.	60
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Generous interior with a large door opening. Thanks to the opposing workstations, the glove box allows work from two sides; operations involving bulky or heavy products are made easier by the second pair of hands.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page [162](#)

More Accessories

can be found starting
on page [110](#)

SICCO Glove Box Duo 1 with Transfer Chamber Antistatic

Panels:	Material:	Temperature Resistance:	Use:	Base:
Bluish	PC-ESD	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with conductive polycarbonate panes, base made of conductive polyethylene. The front side features four access ports and two pairs of size 9.75 gloves made of conductive EPDM, plus three leads-in on the rear side (top right / middle / top left). Two transfer chambers (right and left) each feature two doors. The outer doors have a latch to prevent accidental opening, and the tray protrudes into the working area when the door is opened for easy removal of introduced products. The working area and transfer chambers each include two hose connections for gassing and ventilation as well as matching hoses (3 x 5 m PVC gassing hose and 3 x 5 m PE ventilation hose). All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).



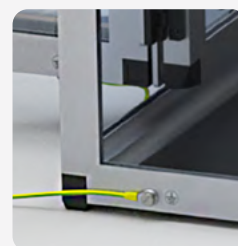
Article No.:	V 1735-08
Overall External Dimensions * W x H x D mm	2300 x 690 x 590
Usable Interior Space W x H x D mm	1680 x 650 x 550
Internal Volume Liters	600
Total Weight kg, approx.	44
Max. Load, Evenly Distributed kg, approx.	80
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	1680 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Generous interior with a large door opening. The necessary devices can also be installed inside one glove box for setting up two workstations and carrying out several working steps sequentially. The position of the access ports allows for easy transfer of working materials from transfer chamber to transfer chamber.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page 163

More Accessories

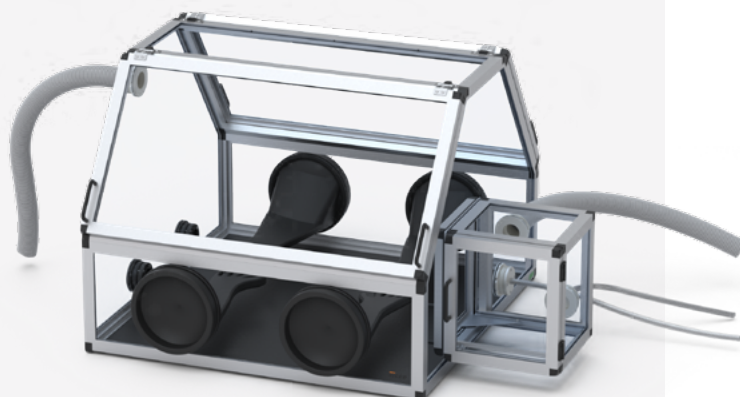
can be found starting
on page 110

SICCO Glove Box Duo 2 with Transfer Chamber Antistatic

Panels: Bluish	Material: PC-ESD	Temperature Resistance: -20 °C to +70 °C	Use: Normal Pressure	Base: Rubber Feet
--------------------------	----------------------------	--	--------------------------------	-----------------------------

Product Description:

Aluminum frame with conductive polycarbonate panes, base made of conductive polyethylene. The front and rear sides each feature one door opening, two opposing access ports, two pairs of size 9.75 gloves made of conductive EPDM, and two leads-in (bottom left). The transfer chamber (right side) features two doors. The outer door has a latch to prevent accidental opening, and the tray protrudes into the working area when the door is opened for easy removal of introduced products. The transfer chamber can only be operated from one workstation side (front side right). The working area and transfer chamber each include two hose connections for gassing and ventilation as well as matching hoses (2 x 5 m PVC gassing hose and 2 x 5 m PE ventilation hose). All materials used are capable of dissipating electrostatic charges via a grounding cable that can be connected on the reverse side (M6 connection thread).



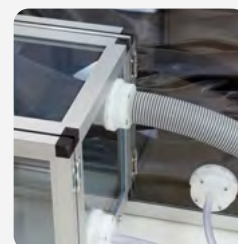
Article No.:	V 1715-08
Overall External Dimensions * W x H x D mm	1180 x 690 x 886
Usable Interior Space W x H x D mm	850 x 650 x 846
Internal Volume Liters	475
Total Weight kg, approx.	32
Max. Load, Evenly Distributed kg, approx.	60
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430
Gassing Connection – Diameter mm	Ø 9
Panel Bores mm	Ø 74,5

Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	270 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Applications:

Generous interior with two large door openings. The opposing workstations allow work to be carried out from two sides inside the glove box, and the second pair of hands facilitates working steps with bulky or heavy products.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.





**Need Replacement
Gloves or Different Sizes?**

All info on page [163](#)

More Accessories

can be found starting
on page [110](#)

SICCO Mini Glove Box

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA	-20 °C to +70 °C	Normal Pressure	Rubber Feet



Product Description:

Acrylic glass panes and base, with access ports laterally featuring iris ports (1x right, 1x left).

Article No.:	V 1705-08
Overall External Dimensions * W x H x D mm	300 x 400 x 400
Usable Interior Space W x H x D mm	290 x 390 x 390
Internal Volume Liters	34
Total Weight kg, approx.	5,7
Total load, Evenly Distributed kg	10
Port Opening mm	Ø 170

Applications:

For the easy handling of small product quantities in an enclosed working space. Easily transportable due to low net weight. The iris ports can be easily replaced with gloves for access ports with a Ø 190 mm diameter for a tight seal.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



More Accessories 
can be found starting
on page 110

SICCO Gas Dosing Unit

Humidity:
0 - 50 % r.F.

Base:
Rubber Feet



Product Description:

Regulates the introduction of gas into a SICCO glove box to reduce gas consumption. Set consists of a gas doser, sensor cable, hose for connecting the flow regulator and the measuring device, and a power cable. A 230 V/50 Hz power connection and two free leads-in for gas supply and sensor are required.

Article No.:	V 1775-02
Setting Range Humidity	0 - 50 % RH
Display Range	0,1 - 99 %, -30°C to +70°C
Measurement Accuracy	±3 % RH, ±0.5°C
Resolution	0.1 % RH, 0.1°C
Gas Supply flow Rate	2 - 10 l/min.
Sensor Cable Length	1,2 m
Weight	1800 g

Applications:

The gas flow is controlled based on the relative humidity inside the interior. Monitoring is done via a sensor that is introduced through a leads-in. As soon as the desired residual humidity is reached, the gas supply is stopped. If there is a deviation of 1 % from the set value, the passage is automatically opened and flushed with gas again.

How It works:

For constantly maintained humidity in the working space of your glove box, we recommend using the SICCO Gas Doser, which is connected between the gas valve and the glove box. For operation, you need two free leads-in, through which the sensor and the gassing hose coming from the device are connected to the glove box interior.

You simply set the desired relative humidity on the Gas Doser; the gas supply is open. As soon as the set value is reached, the supply line is closed within the Gas Doser. The sensor inside the interior continuously monitors the humidity. As soon as the humidity deviates by more than 1 % from the set value, the gas supply is automatically reopened within 3 minutes, thus keeping the humidity at a constant level. This time delay prevents unnecessary gas from being introduced when the door is briefly opened. An alarm sounds if the set value deviates by more than 5 %. Such a deviation can occur, for example, if the door is permanently open or if the gas bottle is empty. The automatic on/off function allows you to save up to 60 % of gas.



Drying Properties

Please see our notes on page [124](#)

Functionality

Learn more about the functionality on page [160](#)



Is the Gas Consumption of Your Glove Box Too High?

Simply mount the Gas Saving Valve on your ventilation hose for a nearly gas-tight seal. The passage opens automatically for pressure equalization. More on the „Gas Saving Valve“ pages [105](#) and [161](#).

SICCO Glove Box Air Stream with Transfer Chamber

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA/PE	-20 °C to +70 °C	Normal Pressure	Rubber Feet

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features two access ports with one pair of size 9 natural rubber gloves, plus two leads-in on the rear side (top right / top left). The transfer chamber (right side) features two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. An integrated filter unit in the top section creates a highly pure atmosphere in the working area by means of HEPA filtration. A manometer displays the filter saturation. PE pipe nozzles for easy conversion from recirculation mode to fresh air or exhaust air mode are included in the scope of delivery. The filter cassette is exchangeable. Maintenance- and fault-free motor. A 240 V/50 Hz power connection is required.

Article No.:	V 1745-08
Overall External Dimensions * W x H x D mm	1180 x 1015 x 670
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters, approx.	290
Total Weight kg, ca	42
Total load, Evenly Distributed kg	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430

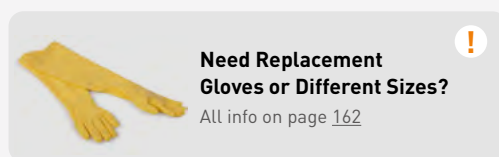
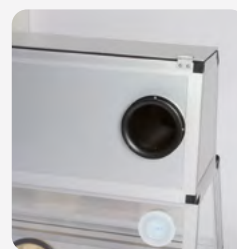
Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	275 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

Filter Unit Details:	
Operating Modes	Recirculating air, fresh air, exhaust
Filter Class according to EN 1822:209	H14
Filtration Efficiency (MPPS Method)	99.995 % of all particles >0.1 µm are retained
Filter Cassette Dimensions W x H x D mm	305 x 305 x 78
Installation Depth of Filter Cassette mm	78 - 83

Applications:

for working in a highly pure atmosphere.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page [162](#)

More Accessories

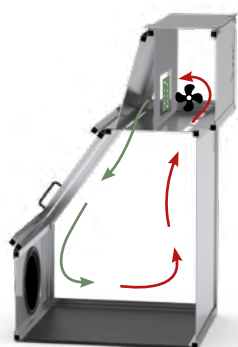
can be found starting
on page [110](#)

Working with the SICCO Glove Box

Air Stream with Filter Unit

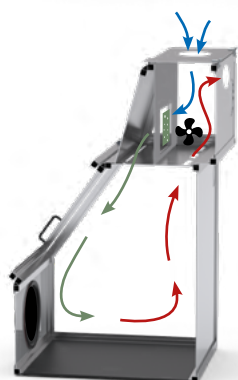
Glove boxes are used wherever sensitive substance mixtures or components are handled or processed in a closed space. If contamination by particles of any kind from the ambient air must be excluded, a high-purity atmosphere is also required. This can be easily achieved with the SICCO Glove Box Air Stream through the integrated HEPA filtration. The included H 14 filter retains more than 99.995 % of all particles larger than 0.1 µm. The filter cassette is replaceable and can be exchanged for any filter with the installation dimensions of Width 305 x Height 305 x Depth 78-83 mm. The saturation level of the filter is indicated by the manometer on the front. The fan is suitable for conveying normal or slightly dusty, mildly aggressive, and moist air and is also designed for trouble-free and maintenance-free operation.

SICCO Filter Unit with Three Operating Modes



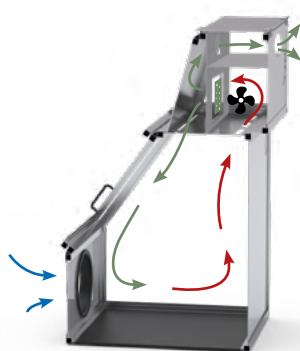
Recirculating Air Mode

In recirculating air mode, the air in the workspace is continuously circulated. It is drawn in at the rear wall, passed through the filter, and blown back into the interior along the front panel (delivery state)



Fresh Air Mode

In fresh air mode, fresh air is drawn from the surroundings, passed through the filter, and blown into the interior along the front panel. The air from the interior is drawn in along the rear wall and released to the surroundings or a connected extraction system. For this, the included intake nozzle must be attached to the corresponding opening, and the closing lid at the exhaust air opening must be removed. Accessories for connecting to an existing extraction system are not included.



Exhaust Mode

In exhaust mode, the motor sucks the air from the interior, guides it through the filter, and releases it filtered to the environment via the exhaust air opening. Ambient air is drawn in from the surroundings through the port openings, so that a pressure equalization takes place in the workspace. The inward flow of air simultaneously prevents air from escaping from the workspace into the environment. For exhaust mode, the intake nozzle is removed and the opening is closed with the closing lid. Additionally, the air supply to the interior is closed by means of a flap and the gloves at the port openings are removed. If desired, optionally available Iris Ports can be mounted on the port openings (see Article No.: V 1976-07 on page 121) to minimize air exchange when the motor is switched off.

SICCO Glove Box Pure with Transfer Chamber

Panels:	Material:	Temperature Resistance:	Use:	Base:
Clear	PMMA/PE	-20 °C to +70 °C	Normal Pressure	Rubber Feet

NEW

Product Description:

Aluminum frame with acrylic glass panes, polyethylene base. The front side features two access ports with one pair of size 9.75 gloves made of UV-resistant EPDM, plus two leads-in on the rear side (top right / top left). The transfer chamber (right side) features two doors, the outer door having a latch to prevent accidental opening. The tray protrudes into the working area when the door is opened for easy removal of introduced products. An integrated UV lamp with lifespan monitoring in the top section is used for surface and air disinfection in the working area; the radiator is exchangeable. The UV radiator is an ozone-free radiation source that does not emit radiation below 220 nm. A 240 V, 50/60 Hz power connection is required.

Article No.:	V 1740-08
Overall External Dimensions* W x H x D mm	1180 x 810 650
Usable Interior Space W x H x D mm	850 x 650 x 550
Internal Volume Liters, approx.	290
Total Weight kg, ca	22
Total load, Evenly Distributed kg	40
Port Opening mm	Ø 188
Center Distance for Port Openings mm	390
Hinged Lid Opening W x H mm	850 x 430

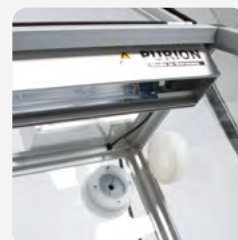
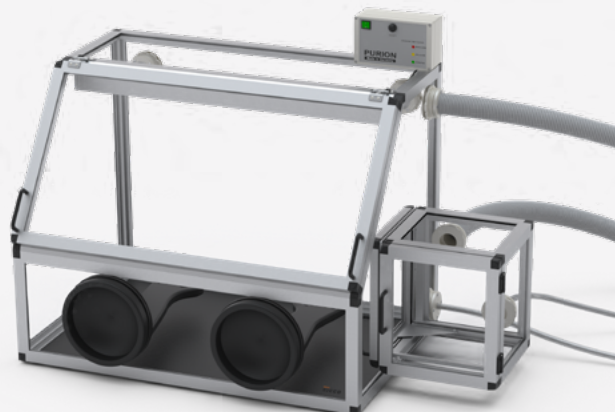
Details Transfer Chamber:	
External Dimensions* W x H x D mm	290 x 325 x 260
Usable Interior Space W x H x D mm	250 x 270 x 220
Internal Volume Liters, approx.	24
Max. Usable Height mm	275 » 1000 ml laboratory bottle with GL 45 thread
Max. Usable Width mm	250
Total Load, Evenly Distributed kg	3

UV Lamp Specifications:	
Irradiation Width mm	660
Lamp Service Life hours	10.000
Number of Lamps	1
Max. Temperature °C	40
Ingress Protection (IP)	IP 65
Power W	36
Warm-Up Time seconds	approx. 30
Duration of Exposure in seconds, excluding warm-up time	approx. 135 for e.g. Salmonella, Anthrax, Diphtheria, Cocci, TBC, Tetanus pathogens. approx. 625 for e.g. Pneumococci

Applications:

Inactivation of microorganisms such as bacteria by short-wave UVC radiation with a germicidal effect. For disinfection of the interior without chemical disinfectants or high temperatures.

*External dimensions are frame dimensions without attached parts, measured from base. Details on page 149.



**Need Replacement
Gloves or Different Sizes?**

All info on page 163

SICCO Gas Saving Valve

Material: Polypropylene Temperature Resistance: max. 80 °C Use: Normal Pressure

NEW

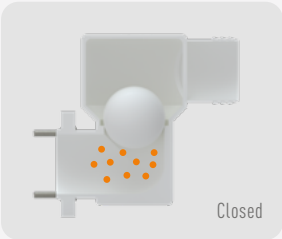
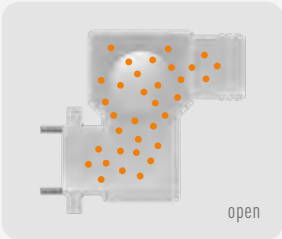
Product Description:

For mounting on a SICCO glove box instead of the standard hose nozzle for the ventilation hose. Features a connection port for a ventilation hose with an inner diameter of Ø 45 mm. The passage to the ventilation hose is sealed almost gas-tight by a ball valve and is automatically opened for pressure equalization only in case of overpressure in the glove box. This minimizes the influx of ambient air via the ventilation hose and reduces gas consumption during the purging process and when working in the glove box.

Article No.:	V 1787-07
Overall External Dimensions * W x H x D mm	75 x 120 x 130
Total Weight g, ca	155 g
Additional Space Required mm	130
Inner Connection Port Ø mm	45
Connection Port Ø mm, graduated	100, 120, 160, 180

Applications:

When mounting, the correct installation position must be observed, additional space required due to protrusion is approx. 130 mm. Includes an Allen key and four mounting screws.



Secure Gas Saving Valve

Learn more about our Gas Saving Valve on page 161



Glove Box

The large, upward-opening swing door allows for a comfortable experimental setup. Its space-saving design convinced us.



SICCO **Air Ionizer**

Material: **PBT** Use: **Normal Pressure** Base: **Stand with Suction Cup**

NEW

Product Description:
Air ionizer with with integrated fan for eliminating local electrostatic charges even at low fan speed. The suction cup tripod allows the air ionizer to be attached anywhere in the working area. The ball joint enables the air stream to be directed in the desired direction. A 240 V/50 Hz power connection is required.

Article No.:	V 1788-01
External Dimensions (without Stand) W x H x D mm	65 x 60 x 37
Stand Length (mm), incl. suction cup and joint	255
Charge Balance	max. +/- 10
Total Weight kg. ca	0,50
Neutralization Time seconds	approx. 1,5 (1.000 V -> 100 V)
Operating Medium	Air
Fan Speed m/s	max. 6,4
Air Volume m³/min	max. 0,2
Operating Temperature °C	0 - +50 (Condensation not permitted)
Humidity % relative humidity	35 - 65 (Condensation not permitted)

Applications:
For removing static charges using ionized air by directing the air stream onto the corresponding surface. Possible areas of application include the processing of electronic components or the prevention of adhesion of dust or powder particles.



SICCO Base Frame for Glove Box

Material: **Aluminium** Use: **Sedentary work** Base: **Rubber Feet**

Product Description:

Aluminum frame with aluminum sheet side walls and back panel as well as four swivel castors (two with brakes), including four desiccator connectors. The stand is specifically designed for seated work. The tabletop can be rolled under it, ensuring that all areas of the glove box are accessible even while sitting. The table surface corresponds to the base area of the SICCO glove box. Additional storage space is provided under the glove box. The stand is delivered fully assembled; only the glove box must be secured against slipping using the desiccator connectors (included in the scope of delivery).

Article No.:	V 1963-02
External Dimensions W x H x D mm	890 x 720 x 600
Weight kg, approx.	17
Total Load, Evenly Distributed kg	100

Applications:

For the ergonomic setup of a glove box workstation. The smooth-running swivel castors allow the stand with the mounted glove box to be easily moved.



SICCO Base frame for Glove Box

Material: **Aluminium** Use: **Standing Work** Base: **Rubber Feet**

Product Description:

Aluminum frame with aluminum sheet side walls and back panel as well as four swivel castors (two with brakes), including four desiccator connectors. The table height is specifically designed for standing work. The table surface corresponds to the base area of the SICCO glove box. Additional large storage space is provided under the glove box. The stand is delivered fully assembled; only the glove box must be secured against slipping using the desiccator connectors (included in the scope of delivery).

Article No.:	V 1962-02
External Dimensions W x H x D mm	890 x 1090 x 600
Weight kg, approx.	24
Total Load, Evenly Distributed kg	100

Applications:

For the setup of a standing workstation. The smooth-running swivel castors allow the stand with the mounted glove box to be easily moved.



SICCO Exhaust Hood

Panel: **Clear**
 Material: **PC/PP**
 Temperature Resistance: **-20 °C to +70 °C**

Applications:

Aluminum frame with polycarbonate panes, top side featuring an integrated connection port for exhaust air made of polycarbonate.

Article No.:	V 1960-02
External Dimensions W x H x D mm	900 x 900 x 600
Usable Interior Space W x H x D mm	860 x 880 x 560
Working Space Opening W x H mm	545 x 600
Connection Port Ø	DN 160
Weight kg, approx.	20

Article No.:	V 1960-04
External Dimensions W x H x D mm	1200 x 900 x 600
Usable Interior Space W x H x D mm	1160 x 880 x 560
Working Space Opening W x H mm	850 x 600
Connection Port Ø	DN 160
Weight kg, approx.	23



More Accessories

can be found starting
on page [110](#)



Also from Bohlender.

b.safe



Sophisticated Safety Solutions for HPLC.

**Simple. Better. Faster.
Directly from the
Manufacturer.**

When it comes to quality and safety, we leave nothing to chance: We develop, design, and manufacture HPLC solutions ourselves.



Request a catalog now or find information at:
bsafe.de/en or **+49 (0) 93 46-92 86-0**

**bsafe.de/en/
products**

SICCO Accessories

Optimize your Products

Our SICCO accessories offer practical solutions to optimally adapt your SICCO desiccators and glove boxes. Expand your storage space with additional shelves or drawers. Do you need hoses, trays, or desiccants? You can also get all of these from us in proven SICCO quality.



SICCO Spare Parts for Sustainable Use

With SICCO spare parts, you not only save money but also contribute to environmental protection.

We always strive to explain clearly which parts are suitable for which products. If you ever need assistance, our trained staff will be happy to help you at: +49 (0) 93 46-92 86-0



Connection Set for Gassing

With our connection set for gassing, you can convert your glove box quickly and easily, saving you money.



Connections for Cables and Gassing

Easy Conversion of
your Glove Box



Gloves and Iris Port Entries

For Increasing
Your Work Safety



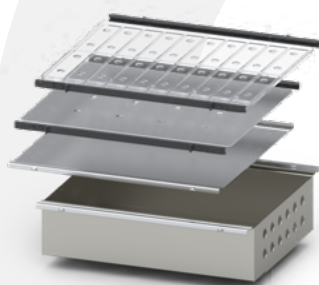
Connection and Mounting Systems

For Better
Organization
and Order



Drip Trays and Shelves

Simple Expansion of the Usable
Area in the Dessiccants



Accessories for Drying

E.g., Gassing
Hoses or Silica Gel



Electronic Hygrometers

Keep Track of
Things

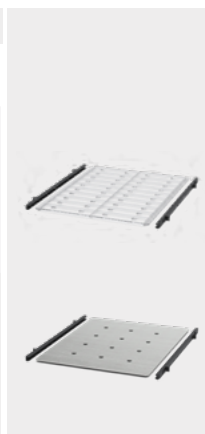


Special Requirements? Custom-Made!

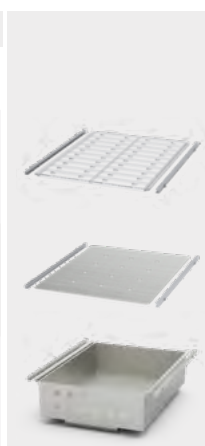
As a manufacturer, we provide tailor-made solutions, often faster and more cost-effective than you think. Talk to our experts about your ideas - we will support you from conception to production, starting from a quantity of 1.

SICCO Shelves for **Star Desiccators**

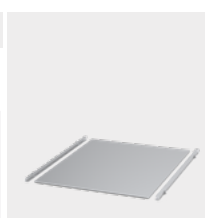
Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf incl. 2 guide rails	258 x 4 x 320	Polycarbonate, transparent; guide rails made of Polyamide	approx. 420 g	10 kg	Star - V 1871-07 Super Star - V 1875-07 Protect Star - V 1879-07 Black Star - V 1891-07 Auto Star - V 1877-07 Thermo Star - V 1830-07	V 1860-68
Shelf with 12 bores Ø 18 mm incl. 2 guide rails	258 x 2 x 320	Stainless steel, guide rails made of Polyamide	approx. 1.305 g	10 kg	Star - V 1871-07 Super Star - V 1875-07 Protect Star - V 1879-07 Black Star - V 1891-07 Auto Star - V 1877-07 Thermo Star - V 1830-07	V 1860-52

SICCO Shelves and Drip Trays for **Tower Star Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf incl. 2 guide rails	258 x 4 x 320	Polycarbonate, transparent; guide rails made of Aluminum	approx. 420 g	10 kg	Tower Star - V 1938-07	V 1860-67
Shelf with 12 bores Ø 10 mm incl. 2 guide rails	258 x 2 x 320	Stainless steel, can be used up to 150°C; guide rails made of Aluminum	approx. 1.305 g	10 kg	Tower Star - V 1938-07	V 1860-51
Drawer and Drip Pan incl. 2 guide rails made of Aluminum	235 x 80 x 320	Stainless steel welded; Drip pan function; 20 mm height	approx. 1.200 g	- Collection volume 1.5 l - Load capacity: 12 kg	Tower Star - V 1938-07	V 1952-08

SICCO Shelves for **Antistatic Star Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf incl. 2 guide rails	258 x 2 x 320	Aluminum	approx. 490 g	10 kg	Antistatic Star - V 1910-07	V 1860-55

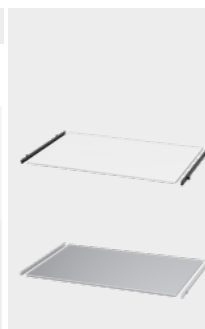
SICCO Shelves for **Star Desiccators Double**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf with 32 bores Ø 10 mm incl. 2 guide rails	565 x 0,8 x 320	Stainless steel; guide rails made of Polyamide	approx. 1.350 g	10 kg	Star Double - V 1930-07	V 1860-61



SICCO Shelves for **Horizontal Star Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf incl. 2 guide rails	474 x 4 x 320	PMMA, transparent; guide rails made of Polyamide	approx. 735 g	1,5 kg	Horizontal Star Desiccators V 1899-07	V 1860-73
Shelf incl. 2 guide rails	474 x 4 x 320	Aluminum	approx. 1.650 g	10 kg	Horizontal Star Desiccators V 1821-07	V 1860-57



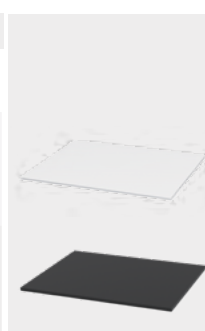
SICCO Shelves and Drip Trays for **Vitrum Star Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf with 12 bores Ø 18 mm incl. 2 guide rails made of Aluminum	258 x 2 x 320	Stainless steel, can be used up to 150 °C	approx. 1.305 g	10 kg	Auto Star Vitrum V 1823-07 Super Star Vitrum V 1825-07	V 1860-51
Drawer and Drip incl. 2 guide rails made of Aluminum	235 x 80 x 320	Drip pan function; 20 mm height	approx. 1.200 g	- Collection volume 1.5 l - Load capacity: 12 kg	Auto Star Vitrum V 1823-07 Super Star Vitrum V 1825-07	V 1952-08



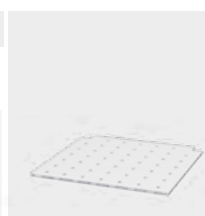
SICCO Shelves for **Mini Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf	211 x 2,0 x 178	PMMA, transparent	approx. 90 g	2 kg	All Mini Desiccators	V 1860-75
Shelf	211 x 4,0 x 178	PE dissipative	approx. 149 g	2 kg	All Mini Desiccators	V 1860-77



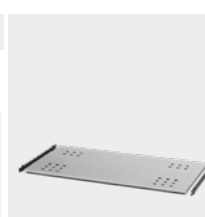
SICCO Shelves for **Vacuum Desiccators**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf	258 x 5,0 x 250	PMMA, transparent	approx. 380 g	9 kg	All Vacuum Desiccators	V 1860-30



SICCO Shelves for **Maxi 1 Desiccators Horizontal**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf incl. 2 guide rails	1023 x 0,8 x 515	Stainless steel, guide rails made of Polyamide	approx. 3960 g	30 kg	Maxi 1 Horizontal - V 1835-07	V 1860-05



SICCO Shelves and Drip Trays for **Big Star/Maxi Desiccators/Wall**

Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf with 36 bores Ø 20 mm incl. 2 guide rails made of aluminum	495 x 0,8 x 515	Stainless steel, can be used up to 150 °C	approx. 1.800 g	30 kg	Big Star Vitrum - V 1844-07 Maxi 1 Vitrum - V 1846-07 Maxi 2 Vitrum - V 1845-07 Big Star Antistatic - V 1925-07 Maxi 1 Antistatic - V 1922-07 Maxi 2 Antistatic - V 1923-07 Desi Wall Antistatic - V 1997-08	V 1860-02
Drawer and Drip Pan incl. 2 guide rails made of aluminum	472 x 120 x 515	Stainless steel welded; Drip pan function; 15 mm height	approx. 3.300 g	- Drip pan volume 3,5 l - Load capacity 30 kg	Big Star Vitrum - V 1844-07 Maxi 1 Vitrum - V 1846-07 Maxi 2 Vitrum - V 1845-07 Big Star Antistatic - V 1925-07 Maxi 1 Antistatic - V 1922-07 Maxi 2 Antistatic - V 1923-07 Desiccators Wall Antistatic V 1997-08	V 1951-08



Item Description:	W x H x D mm:	Material / Properties:	Weight incl. Rails:	Volume / Max. Load:	Suitable for Desiccators:	Article No.:
Shelf with 36 bores Ø 20 mm incl. 2 guide rails	495 x 0,8 x 515	Stainless steel, guide rails made of Polyamide	approx. 1.800 g	30 kg	Big Star - V 1896-07 Maxi 1 - V 1852-01 Maxi 2 - V 1853-01 Big Star Low - V 1897-07 Desi Wall - V 1994-08 Big Star Protect - V 1926-07 Maxi 1 Protect - V 1927-07 Maxi 2 Protect - V 1928-07 Auto Big-Star - V 1894-07 Auto Maxi 1 - V 1914-01 Auto Maxi 2 - V 1916-02 Auto Desi Wall - V 1995-08 Big-Star Black - V 1939-07 Maxi 1 Black - V 1936-07 Maxi 2 Black - V 1937-07 Super Big Star - V 1935-07 Super Maxi 1 - V 1932-01 Super Maxi 2 - V 1933-01 Super Desi Wall - V 1996-08	V 1860-03

SICCO Accessories for **Drying / Mini Desiccators**

Item Description:	H x Ø mm:	Material / Properties:	Weight:	Suitable for Desiccators:	Article No.:
Silica Gel with color indicator from orange to dark brown to black, regenerable (does not contain cobalt-II-chloride) Height x diameter 45 x 41 mm		Grit 2.0-5.0 mm, Loss on drying <= 4 %	23 g	All Mini Desiccators	V 1903-04
Silica Gel-Cassette Aluminum cassette with encapsulated silica gel and saturation indicator by color change from blue to pink on the top side.	102 x 12 x 53		40 g	All Mini Desiccators Auto-Glove Box V 1755-08	V 1901-04

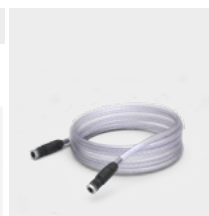


SICCO Accessories for **Drying / all Star / Big Star and Maxi Desiccators**

Item Description:	H x Ø mm:	Material / Properties:	Weight:		Article No.:
Silica Gel with color indicator from orange to dark brown to black, regenerable (does not contain cobalt-II-chloride)		Grit 2.0-5.0 mm, Loss on drying <= 4 %	360 g 720 g		V 1895-04 V 1895-08 More on Page 154
Silica Gel with color indicator from orange to dark brown to black, regenerable (does not contain cobalt-II-chloride)		Grit 2.0-5.0 mm, Loss on drying <= 4 %	8.000 g		V 1895-12 More on Page 154
Silica Gel Cylinder Aluminum cylinder with encapsulated silica gel and saturation indicator by color change from blue to pink on the top side (regenerable).	136 x 108 mm		750 g		V 1902-04 More on Page 154

SICCO Accessories for all **Gassing Desiccators**

Item Description:	H x Ø mm:	Material / Properties:	Length:	Suitable for Desiccators:	Article No.:
Connection Hoses for gassing including quick couplings made of POM and non-return valve		PVC fabric hose Inner-Ø 6 mm x Outer-Ø 10 mm	5 m	All Super Desiccators	V 1864-01

SICCO Accessories for all **Desiccators (Except Vacuum and Mini Desiccators)**

Item Description:	W x H x D mm:	Material / Properties:	Weight:	Suitable for Desiccators:	Article No.:
Tray for Desiccant for 1000 g Silica Gel	247 x 30 x 297	PBTP	365 g	All Desiccators except Vacuum and Mini Desiccators	V 1861-07



SICCO Hygrometer for **Desiccators**

Item Description:	W x H x D mm:	Measuring Range:	Max. Measurement Error	Weight:	Suitable for Desiccators:	Article No.:
Electronic Thermo Hygrometer with Max-Min function incl. battery LR 44 button cell, holder and mounting screws	52 x 39 x 15	Temperature -10 to +60 °C Air humidity 20–99 % r.h.	± 1 °C for -10 to +50 °C ± 5 % r.h. for 25–75 % r.h. and 0–50 °C	30 g	All Desiccators and Desiccator walls except Mini Desiccators	V 1863-07 More on Page 157
Electronic Thermo Hygrometer with Max-Min function incl. battery LR 44 button cell, holder and mounting screws	52 x 39 x 15	Temperature -10 to +60 °C Air humidity 20–99 % r.h.	± 1 °C for -10 to +50 °C ± 5 % r.h. for 25–75 % r.h. and 0–50 °C	30 g	All Mini Basic Desiccators (for retrofitting) Mini Vitrum V 1811-07	V 1863-05 More on Page 157
Electronic Thermo Hygrometer with Max-Min function incl. battery 1.5 V AAA, mounting material	52 x 39 x 15	Temperature -10 to +60 °C Air humidity 20–99 % r.h.	± 1 °C for -10 to +50 °C ± 5 % r.h. for 25–75 % r.h. and 0–50 °C	171 g	All Desiccators and Desiccator walls except Mini Desiccators	V 1866-07 More on Page 157
Electronic Thermo Hygrometer with Max-Min function incl. battery, calibration protocol, resolution 0.1% r.h. / 0.1 °C, measuring rate 18 seconds	120 x 89 x 40	-10 to +70 °C, ± 0.5 °C -40 to +70 °C td +2 to 98 % r.h. ± 2 % Service life 8736 h		168 g	All Desiccators and Desiccator walls except Mini Desiccators	V 1859-08 More on Page 157

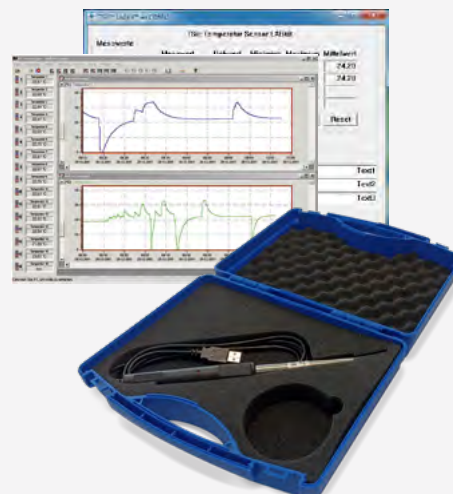


SICCO Humidity-Temperature Sensor with USB Interface

Item Description:	H x in Ø mm:	Measuring Range:	Weight:	Article No.:
Combined Temperature and Humidity measurement Transport case and Windows software for measurement display and data recording included. USB plug Type A, 1.1 or 2.0 compatible. Sensor tube made of stainless steel	125 x Ø 12	0–100 % r.h., $\pm 2\%$ and -40 to $80\text{ }^{\circ}\text{C}$, $\pm 0.5\text{ K}$ Resolution Humidity: 0.01% r.h. Resolution Temperature: 0.01 K	450 g	V 1868-08

Product Description:

- » Combined temperature and humidity measurement
- » Direct PC interface via USB in the handle
- » Wide measuring range
- » High resolution
- » Very good linearity
- » High long-term stability
- » Calculation and display of dew point
- » Absolute humidity
- » Vapor pressure
- » Saturation pressure and enthalpy
- » Tabular display of measured values
- » Recording of data on hard disk
- » Humidity measurement works with a long-term stable capacitive polymer sensor for monitoring storage rooms in the food industry, quality assurance, or in air conditioning technology
- » Humidity measurement systems for customer-specific projects microcontroller applications
- » Compatible with Windows or Linux



SICCO USB Data Logger

Article description:	H x W x D mm:	Measuring range:	Weight	Article No.:
USB Data Logger Scope of delivery: Data logger, wall bracket, 2 x CR 2032 lithium batteries, operating instructions Measuring rate: 1 min to 24 h (freely selectable) Battery life: 1 year (15 min. measuring rate, $+25\text{ }^{\circ}\text{C}$) Memory: 16,000 readings Battery type: 2 x CR 2032 Lithium Protection class: IP 20	60 x 38 x 19	Temperature measuring range: -20 to $+70\text{ }^{\circ}\text{C}$ Temperature accuracy: $\pm 0.5\text{ }^{\circ}\text{C}$ Relative humidity measuring range: 0 – 100% rH Relative humidity accuracy: $\pm 3\%$ rH (2% rH... 98% rH) $+1$ digit $+0.03\%$ rH/K Resolution: $0.1\text{ }^{\circ}\text{C}$ / 0.1% rH	35 g	V 1869-05

Product Description:

The mini data logger Testo 174H is the ideal partner for reliable climate monitoring in storage rooms, offices, or production areas. It features internal sensors for temperature and humidity that deliver long-term stable and precise measurement results. Current measured values as well as possible limit violations can be viewed directly on the easy-to-read display.

The integrated data memory reliably secures up to 16,000 readings – no data is lost even if the battery is empty. For programming and reading out the logger, the device is connected to a computer via a USB interface. Data evaluation is conveniently carried out using the free software (e.g. ComSoft Basic), which allows for the analysis of measurement trends and the creation of reports. The logger is operated with standard commercially available batteries (2x CR 2032), which can be easily replaced by the user.





Professional Laboratory Equipment made of High-Performance Plastics

PTFE | PFA | FEP

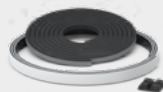
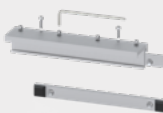
Stirrer shafts, magnetic stirring bars or tubing. These are three of over 1,000 innovative BOLA products made of high-performance plastics. For fast, precise, and safe work in the laboratory.

Request a Catalog now or find information at:
bola.de/en or **+49 (0) 93 46-92 86-0**





SICCO Accessories for Maintenance and Mounting

Item Description:	Dimensions mm:	Material / Properties:	Weight:	Suitable for Desiccators:	Article No.:	
Maintenance Set Star Desiccators for easy replacement of sealing and magnetic tape, to permanently ensure the tight seal of the desiccator.		Consisting of: self-adhesive sealing tape, magnetic tape and four rubber feet	125 g	All Star Desiccators	V 1778-02	
Desiccator Connectors consisting of four clamp pairs, each pair with a screw and nut, one Allen key, assembly instructions.	20 x 60 x 10	Aluminium	100 g	All Star Desiccators except Thermo Star	V 1953-07 More on Page 152	
Wall-Mounting-Set consisting of a pair of wall rails, a pair of hook rails, six cylinder screws and one Allen key. Screws for mounting the wall rails are not included.	20 x 60 x 10	Aluminium	approx. 650 g	All Star Desiccators except Thermo-Star	V 1777-05 More on Page 153	
Maintenance Set for Big Star- and Maxi-Desiccators for easy replacement of sealing and magnetic tape, to permanently ensure the tight seal of the desiccator.		Consisting of self-adhesive sealing tape, magnetic tape and four Rubber Feet	225 g	All Big Star and Maxi Desiccators	V 1779-02	
Desiccator Connectors consisting of four clamp pairs, each pair with a screw and nut, four O-rings made of silicone, one Allen key, assembly instructions.	20 x 60 x 10	Aluminum, Rubber Feet or Casters must be disassembled from the top desiccator during assembly. The included O-rings made of silicone prevent slipping.	110 g	All Big Star and Maxi Desiccators	V 1954-07 More on Page 152	

SICCO Accessories for Glove Boxes

Item Description:	Size:	Material / Properties:	Weight:	Suitable for:	Article No.:	
Protective Tray	Capacity: 10 Liters at approx. 20 mm height	Stainless steel welded, as additional protection for the floor in the working space of the glove box	3500 g	Glove Boxes	V 1971-07	
Gloves made of natural rubber, ambidextrous, tensile-, perforation- and abrasion-resistant, high flexibility, low tension value, low static charge	Size 7 Size 8 Size 9 suitable for openings of Ø 188 mm, Length 780 mm			All Glove Boxes	V 1972-07 V 1972-08 V 1972-09 More on Page 162	
Gloves made of EPDM conductive black, ambidextrous, tensile-, perforation- and abrasion-resistant, high flexibility, low tension value, electrically conductive 105 Ohm	Suitable for Openings of: Ø 188 mm Length: 800 mm Size 9.75			All Glove Boxes	V 1974-09 More on Page 163	

Gloves for Glove Boxes

and their sizes can be found from page [162](#).

SICCO Accessories for **Glove Boxes**

Item Description:	H x Ø mm:	Scope of Delivery:	Material/ Special Feature:	Weight:	Article No.:	
Iris Ports with cord seal and slotted discs made of silicone. The cross-shaped slits of the two silicone discs are mounted offset, so that the interior is easily accessible. At the same time, the port is largely sealed by the overlapping segments when not in use. Iris Ports can be mounted on any SICCO glove box instead of the gloves. Scope of delivery 1 pair. More information on assembly can be found on page 164 .	40 x Ø 215	1 Paar	Polyethylene, silicone	385 g	V 1976-07	
Closing Lid for Port Opening Protection against contamination (e.g. dust particles in the ambient air) by simply placing it on the port opening of your SICCO glove box. The included seal only ensures the secure hold of the lid on the port opening; the seal is not gas-tight.	H 30 x Ø 215	1 Closing lid and 1 cord seal	Polyethylene, silicone	195 g	V 1790-07 More on Page 165	

Item Description:	Dimensions:	Scope of delivery:	Material/Special feature:	Weight:	Article No.:	
Cable Leads-In with cap nut, individual parts made of PP-natural, slotted plug made of silicone-black for a tight seal. Including Allen key and mounting screws. For passing through cables or hard-walled hoses from 0.1 to max. 10 mm outer diameter. Installation in panels with a thickness of 2-4 mm, connection bore-Ø 74.5 mm.	Outer-Ø 86 x Height approx. 41 mm	Cap nut Allen key mounting screws	Polyethylene, silicone	185 g	V 1782-07 More on Page 158	
Cable Leads-In Antistatic with cap nut, individual parts made of PE-Black conductive, slotted plug made of silicone-black for a tight seal. Including Allen key and mounting screws. For passing through cables or hard-walled hoses from 0.1 to max. 10 mm outer diameter. Installation in panels with a thickness of 2-4 mm, connection bore-Ø 74.5 mm.	Outer-Ø 86 x Height approx. 41 mm	Cap nut Allen key mounting screws	Polyethylene conductive, Silicone	185 g	V 1783-07 More on Page 158	
Cable Leads-In Iris-Port Individual parts made of PP-natural, two cross-slotted, offset-mounted discs made of silicone. For the direct passage of cables, hoses, and pipes up to outer-Ø 40 mm. Installation in panels with a thickness of 2-4 mm, connection bore-Ø 74.5 mm.	Outer-Ø 86 x Height approx. 41 mm		Polycarbonate, silicone	110 g	V 1789-07 More on Page 158	
Connection Set for Gassing Consisting of two discs with hose connections made of PP-natural, gassing hose made of PVC with inner-Ø 9 mm, ventilation hose made of PE with inner-Ø 45 mm, hose length 5 m each. Including Allen key and mounting screws.			Polyethylene	1985 g	V 1785-07	

SICCO Technical Information

Drying Performance Test

We at SICCO understand the importance of precise control of relative humidity in your working environment. Therefore, we have conducted extensive tests and simulations to ensure that our products meet even the most demanding requirements.

Learn more about our methods for measuring and optimizing humidity, including typical scenarios such as opening and closing the desiccator doors and the resulting effects on the internal climate.



Introducing Products Through the Transfer Chamber

Learn how the relative humidity changes when you open the Transfer Chamber of a glove box and close it again after 30 seconds.



Rapid Reduction of Humidity by Introducing Nitrogen

Learn how the humidity in a desiccator develops when you introduce nitrogen in a controlled manner.

In the test, two typical situations were simulated: firstly, how quickly the humidity decreases from an assumed humidity of 100 %, and secondly, how long it takes to return to the initial value after a 30-second door opening.

With the help of the SICCO Gas Dosing Unit, which controls the gas supply depending on the humidity, you can follow the process precisely. You will be amazed at how effectively and quickly the humidity is reduced. You can find the exact result on page [131](#).



Insight Through Statistics

Discover how long it takes for the relative humidity in a desiccator or glove box to regulate after opening the door. We have prepared our results in detail.

You can thus easily transfer the test scenario to your application and better assess the possibilities and limits of our products.

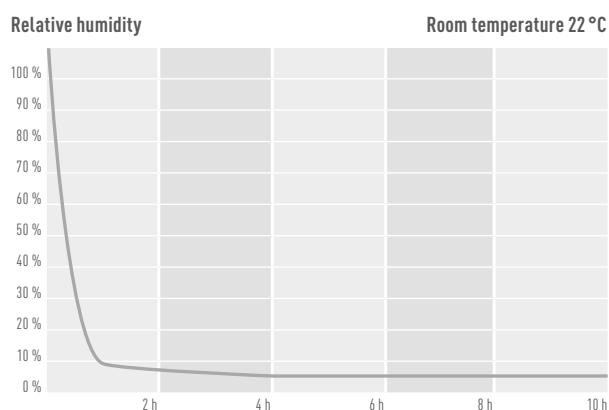
Desiccators With Door Closed

Test Procedure:

A relative humidity of approx. 100 % is simulated in a desiccator. One or more trays containing silica gel are placed inside the desiccator. The door is then hermetically sealed. The curve shows the development of the humidity in relation to the time required.



Star Desiccator



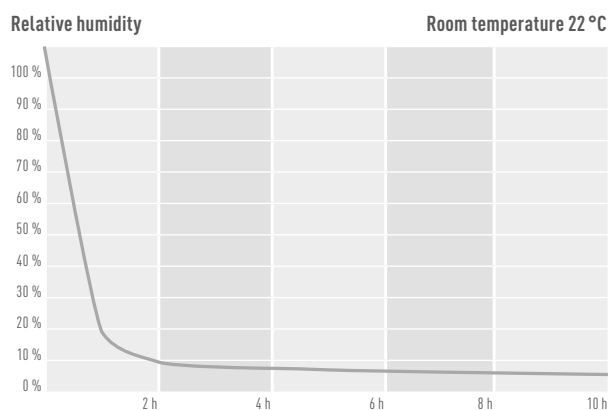
Relative humidity of under 10 % after approx. one hour.

Result:

It was observed that the humidity decreases significantly and rapidly. A value below the 20 % humidity mark was recorded after 40 minutes, and a value of less than 10 % was reached after two hours.

At the bottom of the desiccator, there is one tray (W 247 mm × H 30 mm × D 297 mm) containing 500 g of silica gel.

Star Horizontal Desiccator



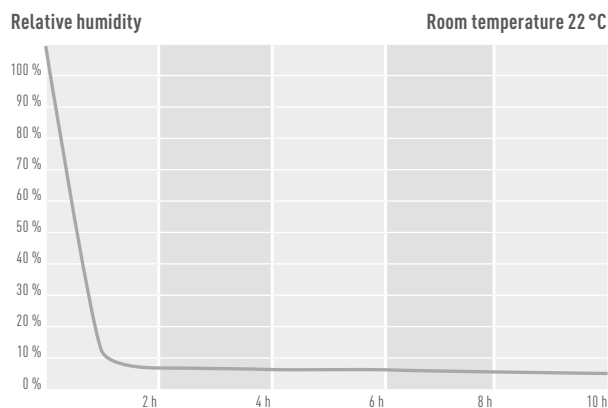
Relative humidity of under 10 % after approx. two hours.

Result:

It was observed that the humidity decreases significantly and rapidly. A value below the 20 % humidity mark was recorded after one hour, and a value of less than 10 % was reached after two hours.

At the bottom of the desiccator, there is one tray (W 247 mm × H 30 mm × D 297 mm) containing 500 g of silica gel.

Maxi 1 Desiccator



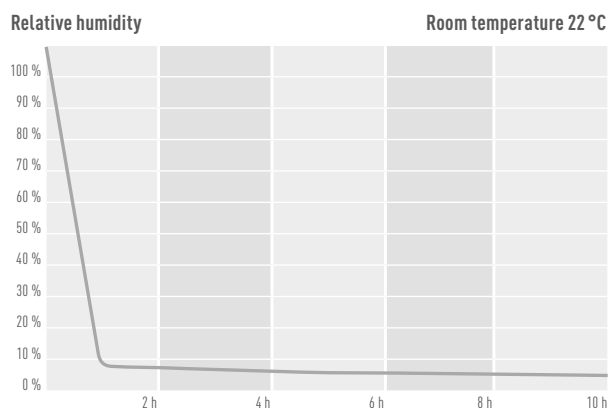
Relative humidity of under 10 % after just over one hour.

Result:

It was observed that the humidity decreases significantly and rapidly. A value below the 20 % humidity mark was recorded after just 50 minutes, and a value of less than 10 % was reached after a total of one hour.

The desiccator contains four trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the upper third, two trays in the middle section, and one tray at the bottom).

Big Star and Maxi 2 Desiccator



Relative humidity of under 10 % after approx. one hour.

Result:

It was observed that the humidity decreases significantly and rapidly. A value below the 20 % humidity mark was recorded after just 40 minutes, and a value of less than 10 % was reached after a total of one hour.

The desiccator contains two trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the middle section and one tray at the bottom).



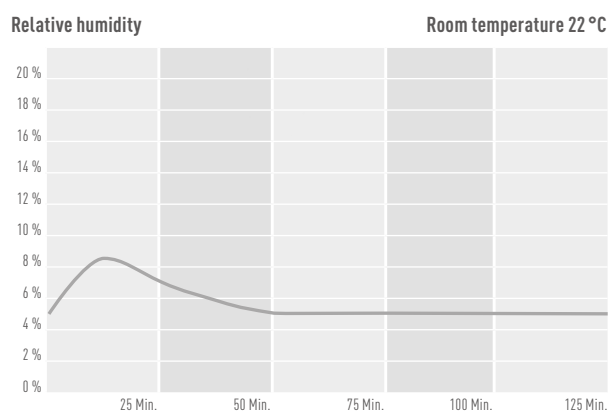
Desiccators

Door Open/Close

Test Procedure:

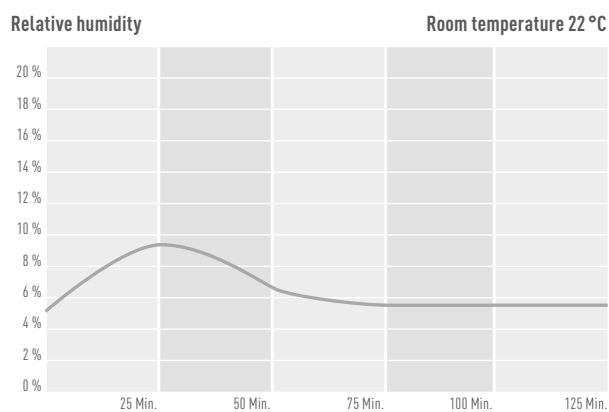
A relative humidity of approx. 5 % is simulated in a desiccator. One or more trays containing silica gel are placed inside the desiccator. On the intermediate shelves, plastic beakers are positioned to simulate barriers (e.g. glass beakers, bottles, etc.). The door is then opened and hermetically sealed again after 10 seconds. The curve shows the development of the humidity.

Star Desiccator



After approx. 60 minutes, the initial value is reached again.

Star Horizontal Desiccator



After approx. 60 minutes, the initial value is reached again



Result:

The brief opening of the door results in an increase in the humidity in the interior of the desiccator by approx. 4 %. However, this increase was completely compensated by the desiccant contained in the desiccator within a period of 60 minutes.

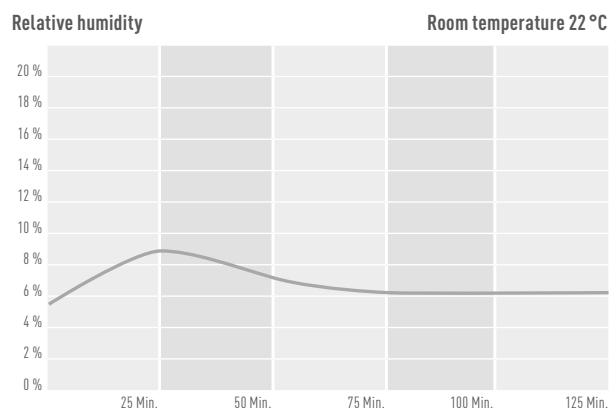
The desiccator contains two trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the middle section and one at the bottom).

Result:

The brief opening of the door results in an increase in the humidity in the interior of the desiccator by approx. 5 %. However, this increase was completely compensated for the desiccant contained in the desiccator within a period of 60 minutes.

The desiccator contains two trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the middle section and one at the bottom).

Maxi 1 Desiccator



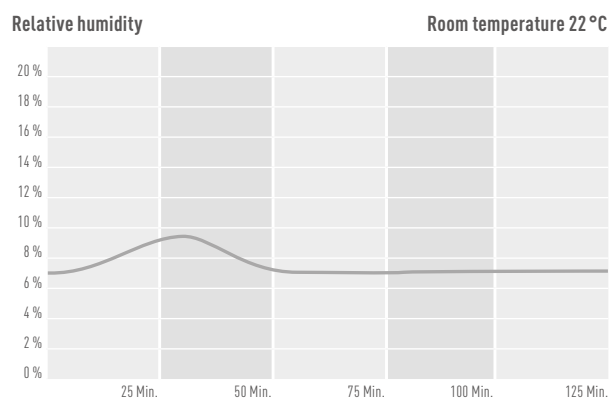
After approx. 75 minutes, the initial value is nearly reached.

Result:

The brief opening of the door results in an increase in the humidity in the interior of the desiccator by approx. 4 %. However, this increase was completely compensated by the desiccant contained in the desiccator within a period of 75 minutes.

The desiccator contains four trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the upper third, two trays in the middle section, and one tray at the bottom).

Big Star and Maxi 2 Desiccator



After approx. 50 minutes, the initial value is reached again.

Result:

The brief opening of the door results in an increase in the humidity in the interior of the desiccator by approx. 3 %. However, this increase was completely compensated by the desiccant contained in the desiccator within a period of 50 minutes.

The desiccator contains two trays (W 247 mm × H 30 mm × D 297 mm), each filled with 500 g of silica gel (one tray in the middle section and one at the bottom).



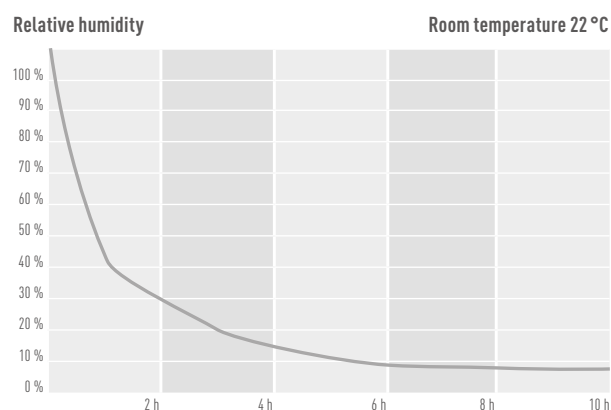
Automatic Desiccators With Door Closed

Test Procedure:

In an Automatic Desiccator, a humidity of 100 % is simulated after a 10-minute pre-drying period. Now the desiccator is switched on, and the door remains tightly sealed until the end of the test. The curves show the development of the humidity in relation to the time required.



Star Automatic Desiccator



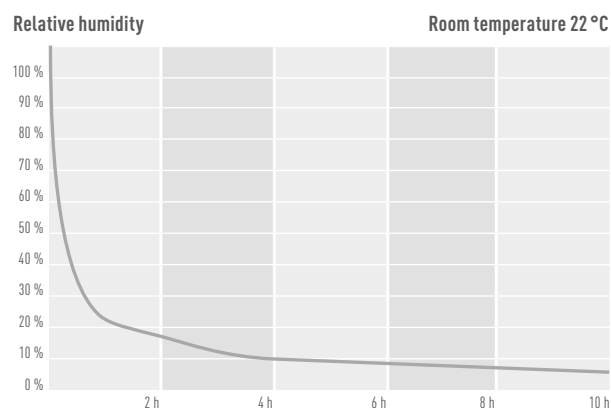
Relative humidity of under 20 % after just over 3 hours.

Drying performance approx. 70 g / 24 h.

Result:

After only 3 hours, due to the automatic drying inside the desiccator, there is again a relative humidity of just 20 %. Frequent checks become unnecessary. Omitting silica gel increases the usable surface area and prevents application errors.

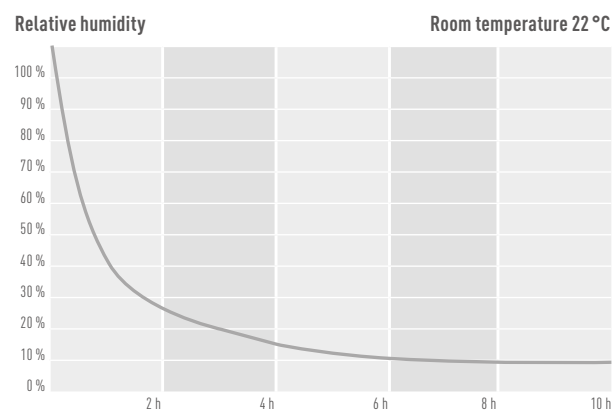
Maxi 1 Automatic Desiccator



Relative humidity of under 20 % after just over 1 hour.

Drying performance approx. 120 g / 24 h.

Big Star and Maxi 2 Automatic Desiccator



Relative humidity of under 20 % after just over 3 hours.

Drying performance approx. 200 g / 24 h.

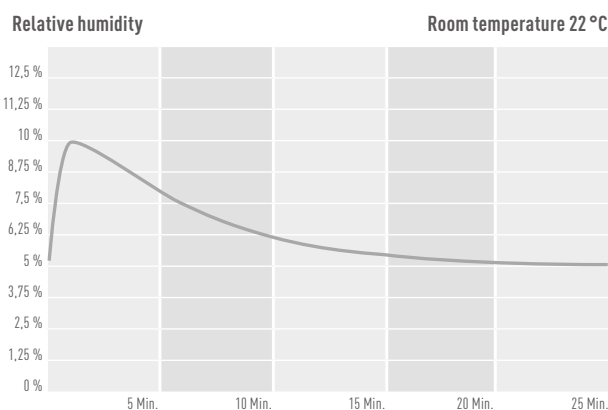
Automatic Desiccators Door Open/Close

Test Procedure:

An Automatic Desiccator equipped with three shelves is loaded in a typical application manner with six 1.5 L bottles on each of the two lower levels. On the top shelf, there are also 12 beakers. A relative humidity of approx. 5 % is generated in the desiccator. Now the door is opened and hermetically sealed again after 10 seconds. The curves show the development of the humidity in relation to the time required.



Star Automatic Desiccator

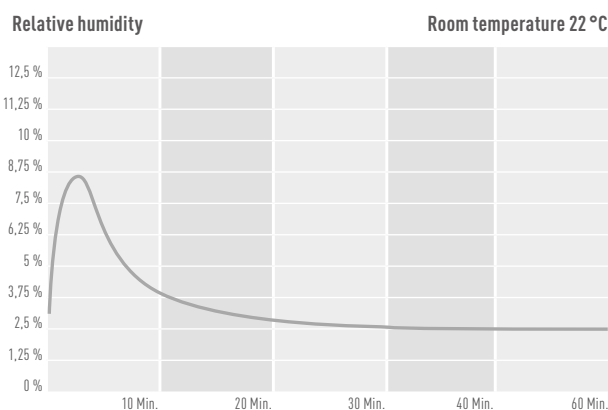


After approx. 20 minutes, the initial value is reached again.

Result:

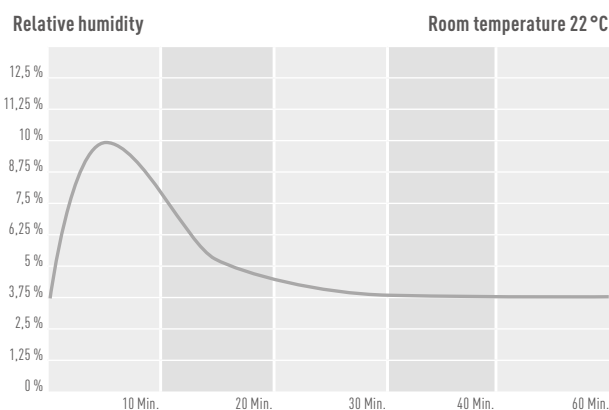
After only a short time, the humidity inside drops back to the initial value of approx. 5 %. Application errors in handling silica gel are reliably avoided.

Maxi 1 Automatic Desiccator



After approx. 45 minutes, the initial value is reached again.

Big Star and Maxi 2 Automatic Desiccator



After approx. 30 minutes, the initial value is reached again.

Automatic Desiccators Upon Interruption of Power Supply

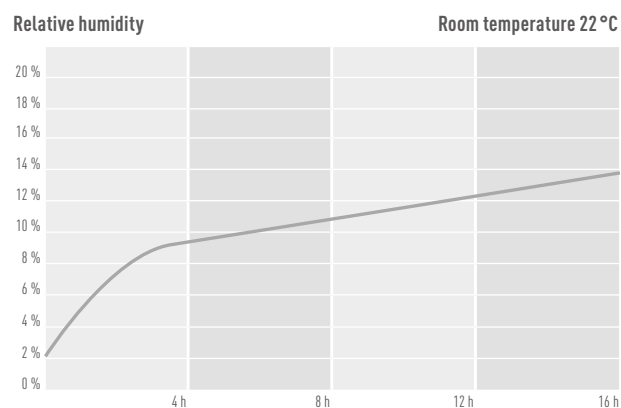
Test Procedure:

An Automatic Desiccator equipped with three shelves is loaded in a typical application manner with six 1.5 L bottles on each of the two lower levels. Plastic beakers are placed on the top shelf to simulate a barrier (e.g. glass beakers, bottles, etc.).

A relative humidity of 5 % is generated in the desiccator. Now the desiccator is switched off at a room temperature of 22°C. The curves show the development of the humidity in relation to the time required.



Star Automatic Desiccator

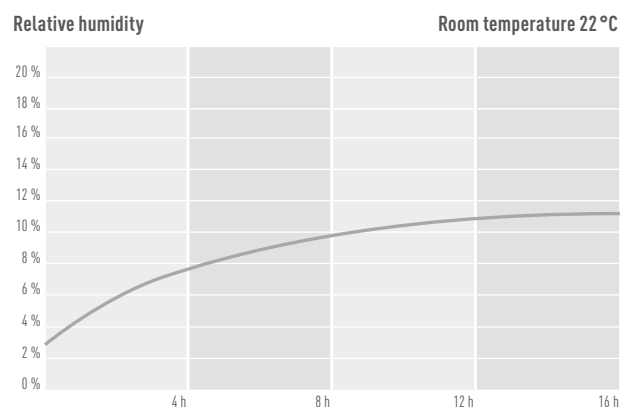


Increase in humidity of only 10 % within 16 hours.

Result:

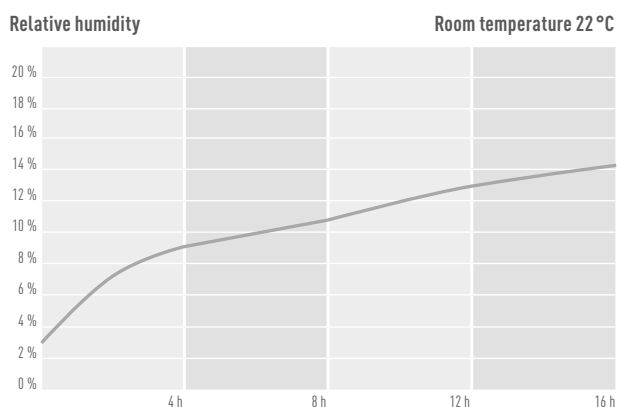
The relative humidity in the interior decreases to the initial value of 5 % already after a short time. User errors in treating silica gel can be avoided reliably.

Maxi 1 Automatic Desiccator



Increase in humidity of only 8 % within 16 hours.

Big Star and Maxi 2 Automatic Desiccator



Increase in humidity of only 9 % within 16 hours.

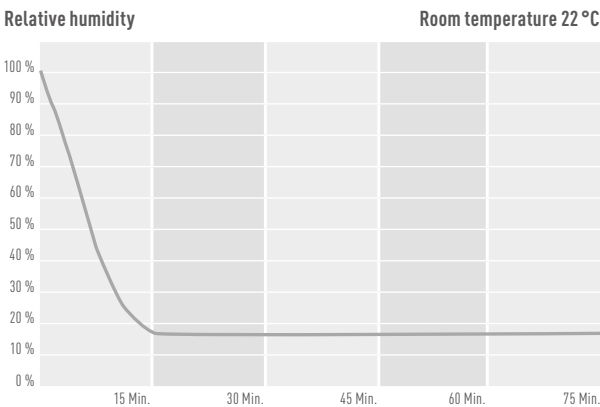
Desiccators for Gassing with Closed Door

Test Procedure:

A humidity of 100 % is simulated in a desiccator. For the nitrogen introduction, a SICCO Gas Dosing Unit is connected to control the gassing and monitor the humidity. The target humidity to be reached is set to 10 %, the flow rate to 8 liters/min., and the pressure reducer on the nitrogen cylinder to 0.5 bar. The door remains tightly sealed during the test. The curve shows the development of the humidity in relation to the time required.



Super Star / Super Star Horizontal Desiccator

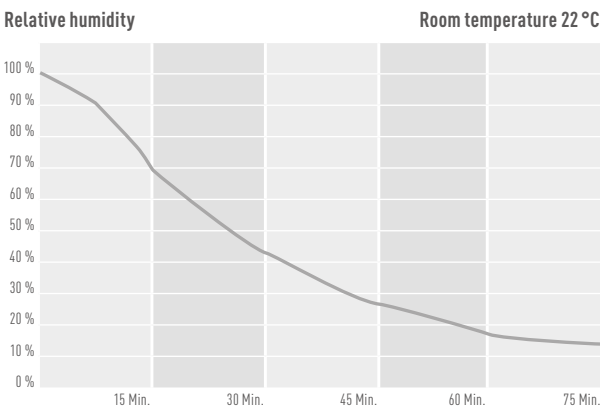


Relative humidity of under 15 % after approx. 15 minutes.

Result:

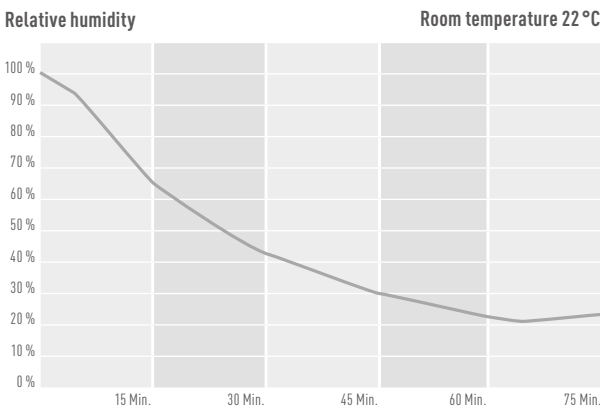
The moist air in the desiccator is displaced by nitrogen with low humidity, and thus the desired relative humidity is reached within a short time.

Super Maxi 1 Desiccator



Relative humidity of under 15% after approx. 65 minutes.

Super Big Star / Super Maxi 2 Desiccator



Relative humidity of under 30 % after 45 minutes.

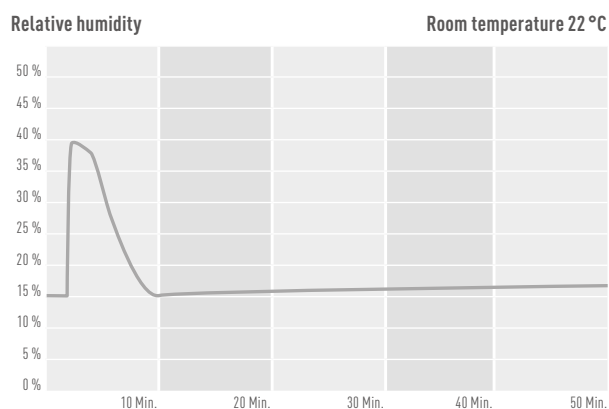
Desiccators for Gassing Door Open/Close

Test Procedure:

In a desiccator, the relative humidity is 15 % due to constant gassing with nitrogen. For the nitrogen introduction, a SICCO Gas Dosing Unit is connected to control the gassing and monitor the humidity. The target humidity to be reached is set to 10 %, the flow rate to 8 liters/min., and the pressure reducer on the nitrogen cylinder to 0.5 bar. The desiccator door is opened completely for 30 seconds. The curve shows the development of the humidity in relation to the time required.



Super Star / Super Star Horizontal Desiccator

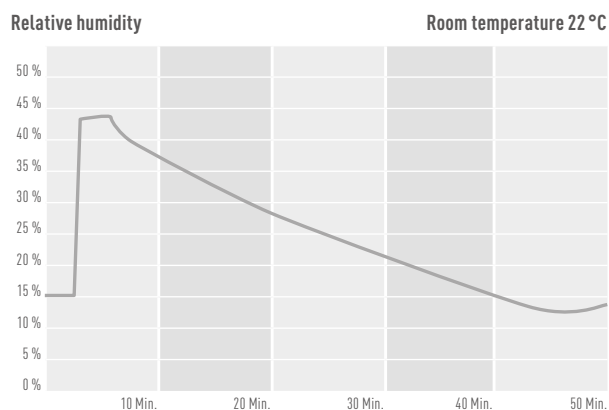


After approx. 10 minutes, the initial value is reached again.

Result:

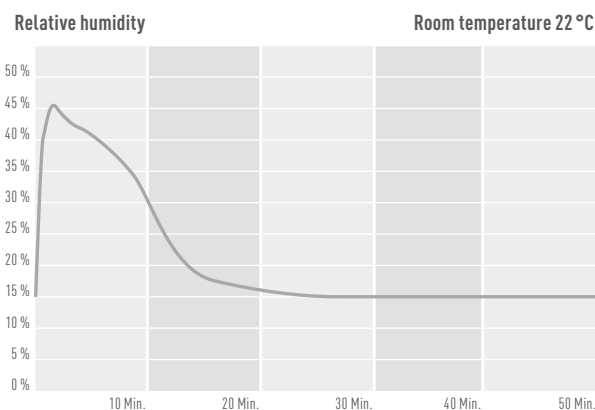
Due to the opening of the door, an air exchange occurs, causing the relative humidity to rise sharply and quickly. When the door is closed, the gas dosing unit resumes operation and the working space is gassed with nitrogen. After only approx. 30 minutes, the initial value is reached again.

Super Maxi 1 Desiccator



After almost 40 minutes, the initial value is reached again.

Super Big Star / Super Maxi 2 Desiccator



After approx. 15 minutes, the initial value is reached again.

Desiccators for Gassing

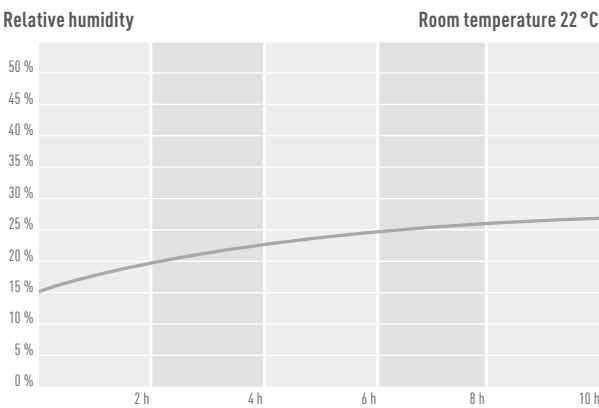
Gas Supply Interruption

Test Procedure:

In a desiccator, the relative humidity is 15 % due to constant gassing with nitrogen. For the nitrogen introduction, a SICCO Gas Dosing Unit is connected to control the gassing and monitor the humidity. The target humidity to be reached is set to 10 %, the flow rate to 8 liters/min., and the pressure reducer on the nitrogen cylinder to 0.5 bar. To interrupt the gas supply, the gas dosing unit is switched off. The desiccator remains tightly sealed during the test. The curve shows the development of the humidity in relation to the time required.



Super Star / Super Star Horizontal Desiccator

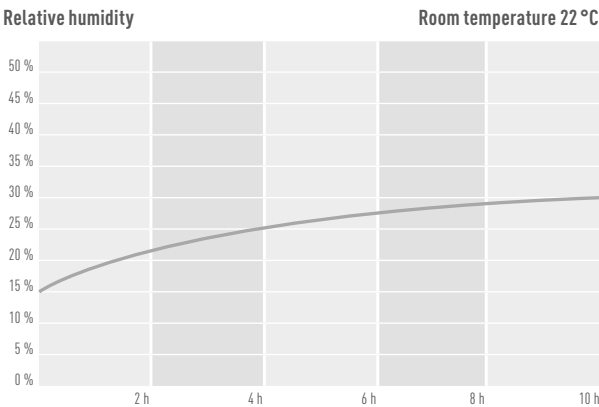


Increase in humidity of only 10 % within 3 hours.

Result:

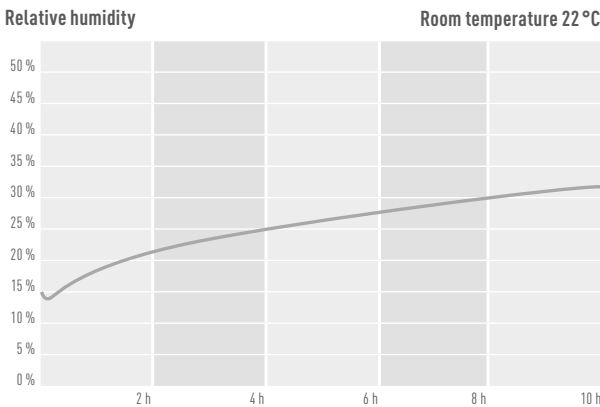
Despite the lack of nitrogen supply, the humidity inside increases only slowly proportional.

Super Maxi 1 Desiccator



Increase in humidity of only 10 % within 10 hours.

Super Big Star / Super Maxi 2 Desiccator

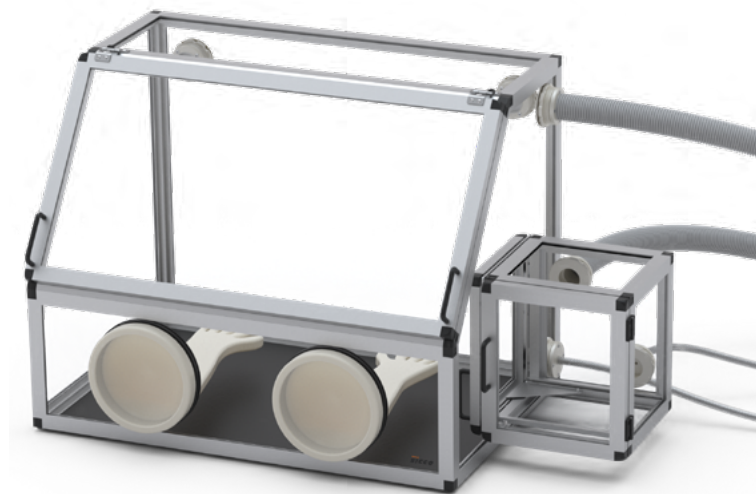


Increase in humidity of only 10 % within 4 hours.

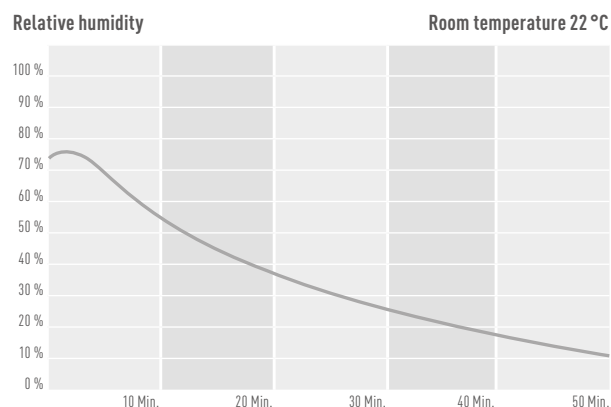
Glove Boxes with Door Closed

Test Procedure:

A humidity of 75 % is simulated in a glove box with a Transfer Chamber. For gassing with nitrogen, a SICCO Gas Dosing Unit is connected to control the gassing, and a SICCO Gas Saving Valve is connected at the outlet for ventilation. On the gas dosing unit, the target humidity to be reached is set to 10 % and the flow rate to 8 liters/min. On the nitrogen cylinder, the pressure-reducing valve is set to 0.5 bar. The glove box and the Transfer Chamber remain tightly sealed during the test. The curve shows the development of the humidity in relation to the time required.



Glove Box



Relative humidity of under 30 % after approx. 40 minutes.

Result:

After about 40 minutes, a relative humidity of 20 % is reached inside the glove box due to the supply of nitrogen. For gassing controlled by the gas dosing unit, the following rule of thumb can be assumed: With a flow rate of 8 liters/min., the relative humidity decreases by 1 % per minute. After approx. 50 minutes, the value falls below 10 % relative humidity.

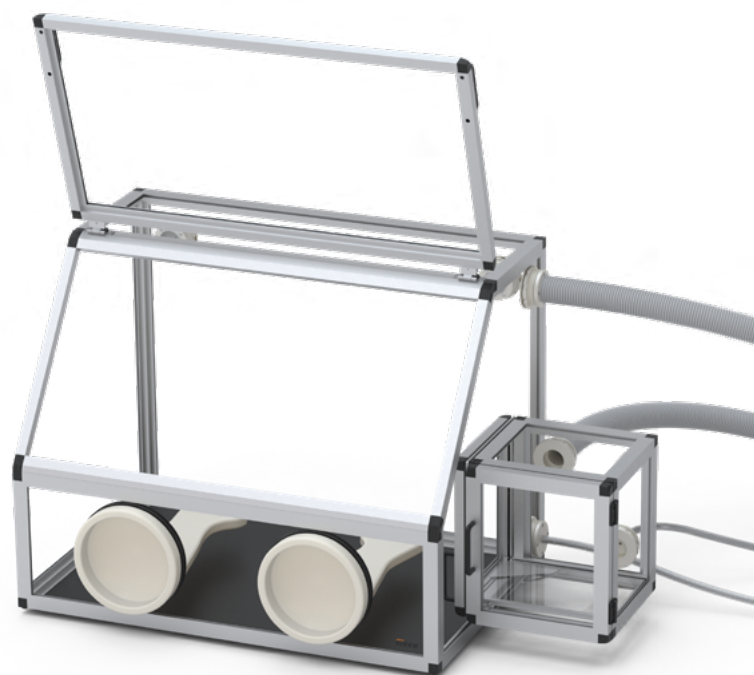
Glove Boxes

Door Open/Close

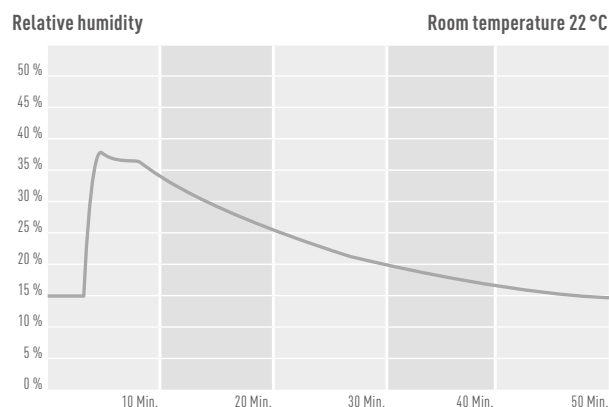
Test Procedure:

In a glove box with an Transfer Chamber, the relative humidity is 15 % due to constant gassing with nitrogen. For gassing with nitrogen, a SICCO Gas Dosing Unit is connected to control the gassing, and a SICCO Gas Saving Valve is connected at the outlet for ventilation. On the gas dosing unit, the target humidity to be reached is set to 10 % and the flow rate to 8 liters/min.

On the nitrogen cylinder, the pressure-reducing valve is set to 0.5 bar. The door to the working space of the glove box is opened completely for 30 seconds; the Transfer Chamber remains tightly sealed during the test. The curve shows the development of the humidity in relation to the time required.



Glove Box



After approx. 30 minutes, the initial value is reached again.

Result:

After a little more than one hour, a relative humidity of 15 % is reached inside the glove box due to the supply of nitrogen. For gassing controlled by the gas dosing unit, the following rule of thumb can be assumed: With a flow rate of 8 liters/min., the relative humidity decreases by 1 % per minute.

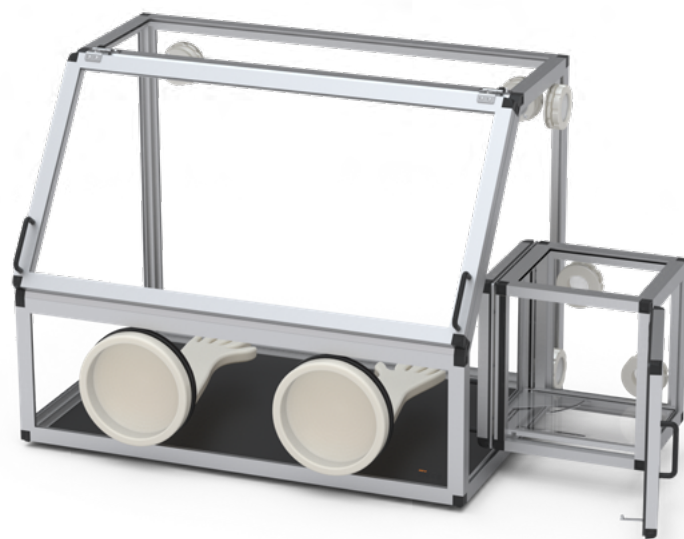
Glove Box with Transfer Chambers

Transfer Chamber Open/Close

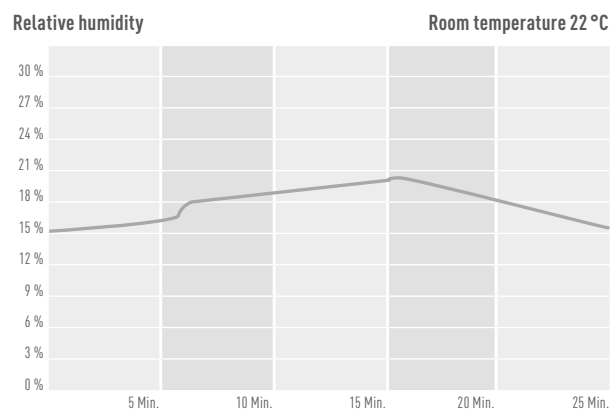
Test Procedure:

In a glove box with an Transfer Chamber, the relative humidity is 15 % due to constant gassing with nitrogen. For gassing the working space with nitrogen, a SICCO Gas Dosing Unit is connected to control the gassing, and a SICCO Gas Saving Valve is connected at the outlet for ventilation. On the gas dosing unit, the target humidity to be reached is set to 10 % and the flow rate to 8 liters/min.

On the nitrogen cylinder, the pressure-reducing valve is set to 0.5 bar. The Transfer Chamber is not purged with gas. The relative humidity in the Transfer Chamber is 47 % at the beginning of the test. The Transfer Chamber door to the working space is opened for 30 seconds. The curve shows the development of the humidity in relation to the time required.



Glove Box



After approx. 25 min., the initial value is reached again.

Result:

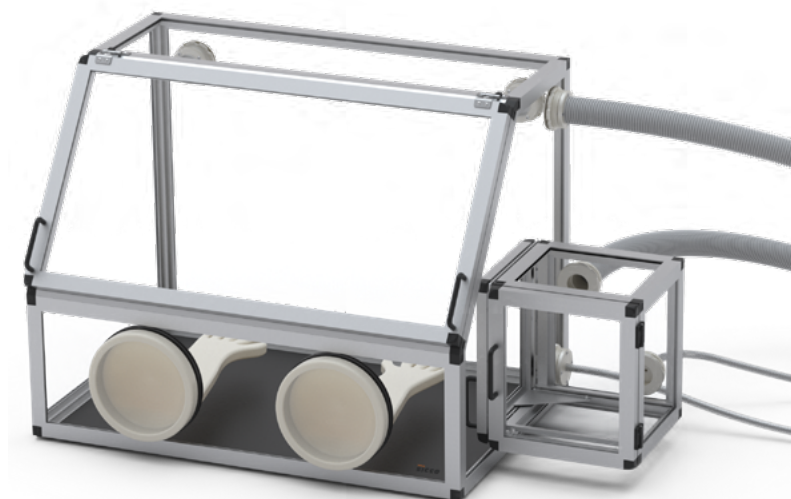
By opening the Transfer Chamber to the working space, the relative humidity rises slightly to approx. 20 %. This increase is compensated for within almost 10 minutes by a renewed supply of nitrogen, and the initial value is reached again.

Glove Box Gassing Gas Supply Interruption

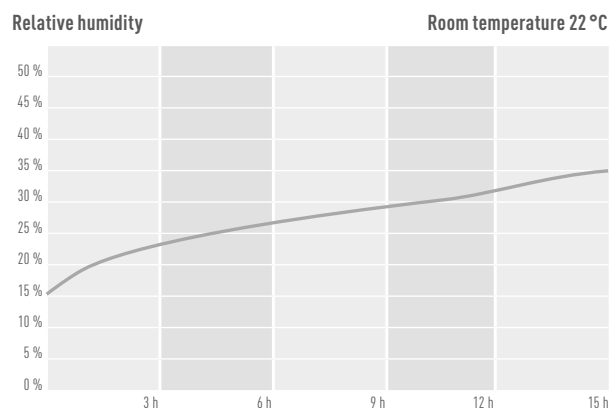
Test Procedure:

In a glove box with an Transfer Chamber, the relative humidity is 15 % due to constant gassing with nitrogen. For gassing the working space with nitrogen, a SICCO Gas Dosing Unit is connected to control the gassing, and a SICCO Gas Saving Valve is connected at the outlet for ventilation. On the gas dosing unit, the target humidity to be reached is set to 10 % and the flow rate to 8 liters/min. On the nitrogen cylinder, the pressure-reducing valve is set to 0.5 bar.

To interrupt the gas supply, the gas dosing unit is switched off. The glove box and the Transfer Chamber remain tightly sealed during the test. The curve shows the development of the humidity in relation to the time required.



Glove Box



Increase in humidity of only 15 % within 11 hours.

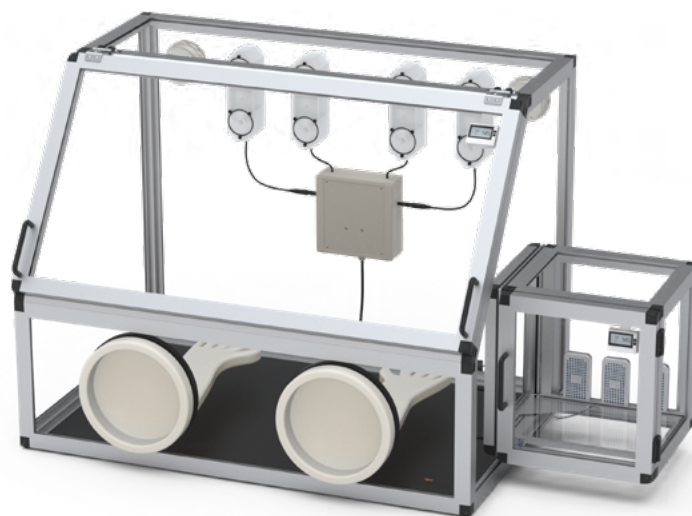
Result:

Despite the gas-saving valve, a slight air exchange takes place via the ventilation hose. After approx. 1 hour, the relative humidity is approx. 20 %; after more than 14 hours, it is at the same level as the ambient air. A short-term interruption of the power supply has only a minor effect on the atmosphere in the working space of the glove box.

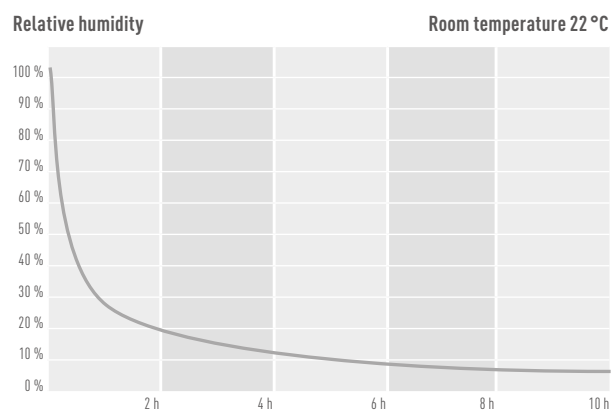
Auto Glove Box with Transfer Chamber With Door Closed

Test Procedure:

A humidity of 100 % is simulated in an Auto-Glove Box with a Transfer Chamber. After 10 minutes, the moisture source was removed and the automatic drying was switched on. The glove box and the Transfer Chamber remain tightly sealed during the test. The curve shows the development of the humidity in the working space in relation to the time required.



Auto Glove Box with Transfer Chamber



Relative humidity of under 15 % after approx. 2.5 hours.

Drying performance approx. 160 g / 24 h.

Result:

It was observed that the humidity decreases significantly and rapidly. A value below the 20 % humidity mark was recorded after 2.5 hours, and a value of less than 10 % was reached after four hours.



SICCO Temperature Resistance

Storing Hot Materials in a Desiccator

The question of what temperature and mass of materials can be placed in a desiccator cannot, unfortunately, be answered with just two numbers. However, we would like to provide you with practical assistance and have run three tests with increased quantities of introduced materials.

Test Procedure:

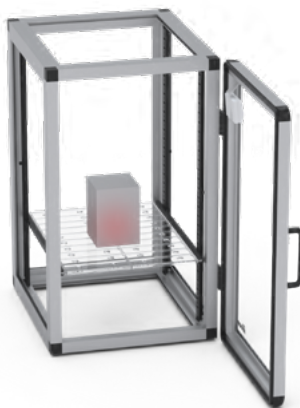
In a SICCO Star Desiccator (Article No.: V 1871-07) with acrylic glass panels, a polycarbonate shelf, and polyamide guide and grid rails, test specimens of different sizes and masses are introduced. The test specimens are each heated in an oven to the test temperature (90 - 180°C, increasing in ten-degree steps) and then placed in the desiccator to cool down. The test specimen is placed in the center of the desiccator. While the specimen cools, observations are made on how the shelf behaves under the temperature and weight of the specimen and whether a temperature increase can be measured in the desiccator.

Test specimen 1:  Aluminum block

 W 80 x L 80 x H 110 mm

 2,0 kg

 160°



Result:

Up to a test temperature of 160°C, no thermal effects are visible on either the shelf or the side panels. At higher temperatures, slight melting marks appear on the polycarbonate shelf. No warming is noticeable on the outer contour of the desiccator.

[More on Page 28](#)

Test specimen 2:

Aluminum cylinder



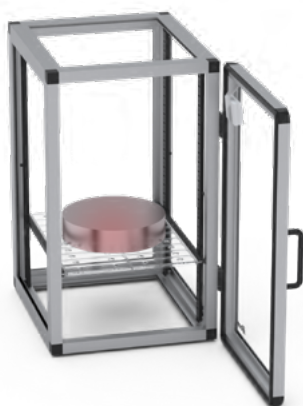
Ø 190 x H 44 mm



3,5 kg



160°

**Result:**

From a test temperature of 160°C, the shelf begins to deform; at temperatures higher than 160°C, deformations remain in the area of the contact surface. No warming is noticeable on the outer contour of the desiccator.

Test specimen 3:

Aluminum block



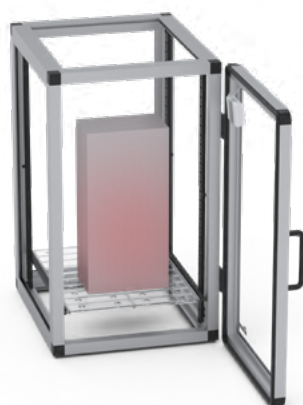
W 90 x L 150 x H 305 mm



12 kg



160°



Due to the weight, the test specimen is placed on a stainless steel shelf in the center of the desiccator; the distance to the outer panels is 10 cm all around.

Result:

With an increase in the test temperature, a warming of the side panels is now noticeable from the outside starting at 160°C; the temperature inside the desiccator is approx. 60°C. The lid panel deforms, but returns to its original shape as the temperature decreases.

Our result: Due to the temperature resistance of polycarbonate of approx. 130°C and a rather low radiant heat at temperatures below 150°C and correspondingly low mass, hot products can also be stored in a desiccator with acrylic glass panels under certain conditions.

However, to be able to use the entire volume, we recommend SICCO Vitrum Desiccators for storing hot products. Then you are on the safe side, especially at temperatures above 150°C and quantities of more than 3 kg.

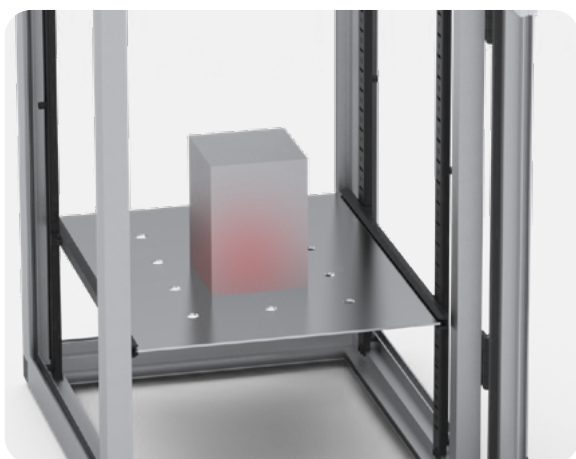
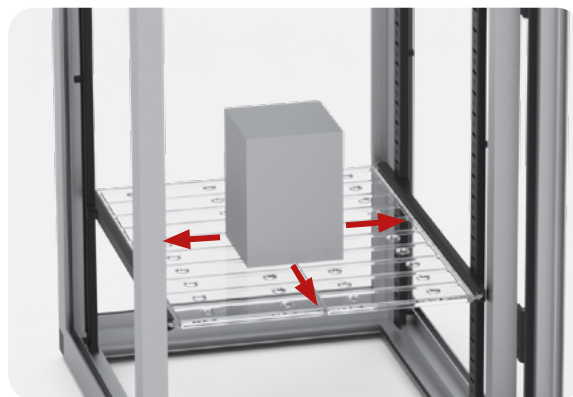
Notes on Storing Hot Products in Desiccators with Acrylic Glass Panels (PMMA)

Central Placement



Place the materials to be stored as centrally as possible in the desiccator and with the greatest possible distance to the side panels.

[More on Page 112](#)



Stainless steel shelf for high temperatures

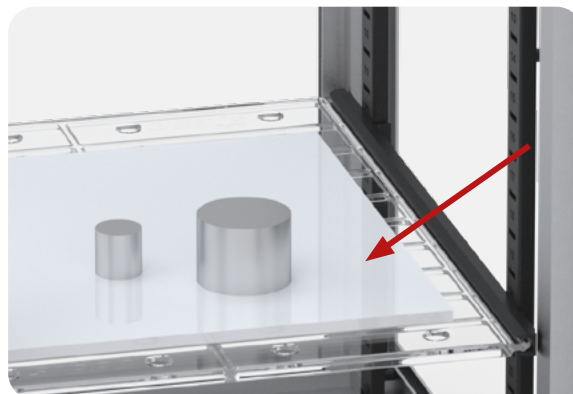


If the products are warmer than 150°C, the use of a stainless steel shelf is recommended.

[More on Page 112](#)

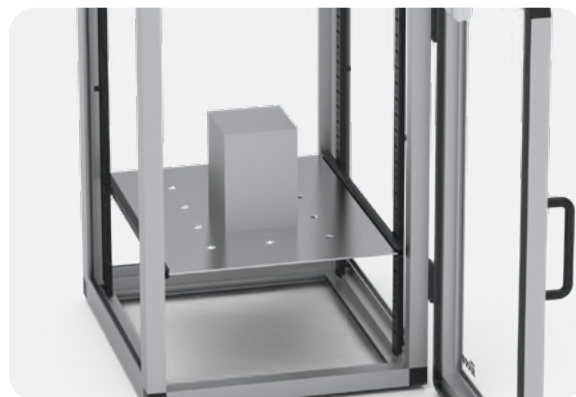
Insulation with PTFE Plate

For small quantities (10-250 g), a PTFE plate with a thickness of approx. 5 mm can also have an insulating effect and protect the polycarbonate shelf.



Star Desiccators up to 2 kg

The quantity of stored materials should not exceed 2 kg for the Star Desiccator size. For larger models, a larger quantity can be introduced, but we have not conducted corresponding tests.

**Heavy Loads and High Temperatures**

For quantities greater than 3 kg and temperatures above 150°C, only Vitrum Desiccators should be used.

More on Page [43](#)

Caution with Mini Desiccators

In Mini-Desiccators, no products with temperatures above 90°C and a weight of more than 100 g should be stored.



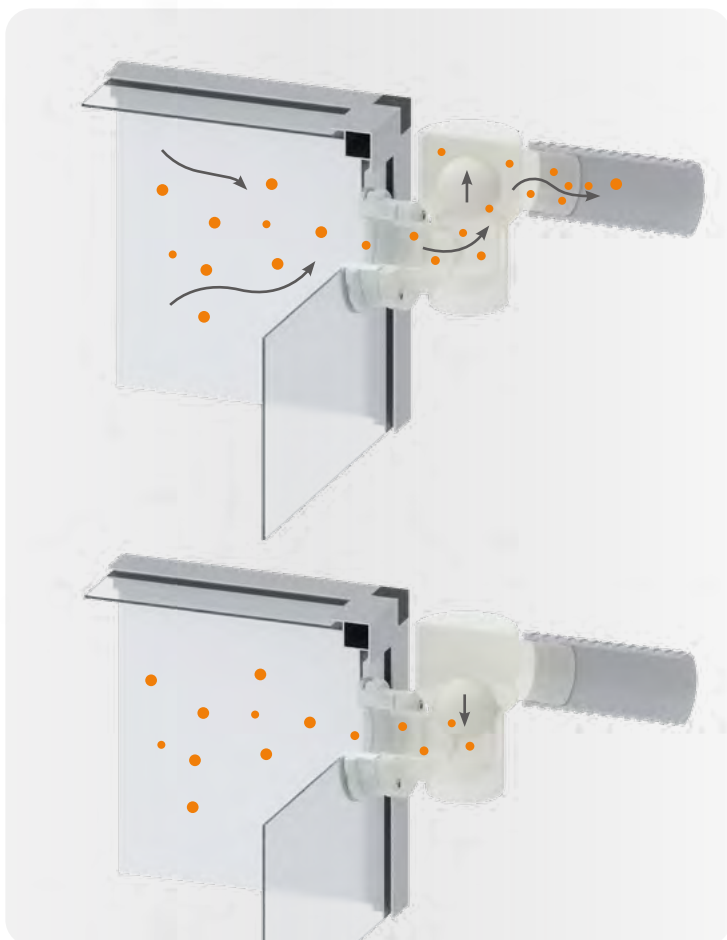
SICCO Technical Information

On the following pages, dive deeper into the technical details: from the precise foot-print dimensions, grid and guide rails, to our mounting options. Furthermore, learn everything about the functionality of silica gel, the advantages of our gas dosing unit, and how you can effectively save costs with our gas-saving valve.



Silica Gel: Desiccant with Versatile Properties

Learn more about silica gel, a highly effective desiccant that absorbs moisture and protects products from moisture damage.

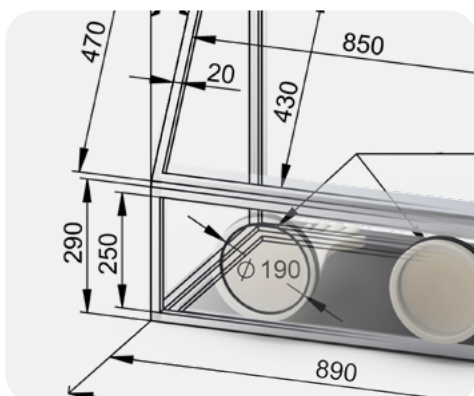


Discover the Advantages of the SICCO Gas Saving Valve

With the SICCO Gas Saving Valve, you can significantly optimize the gas consumption in your glove box. Thanks to its simple operating principle, which requires no complicated control system or additional power supply, you save time and effort.

The valve opens automatically during the gassing process and vents excess gas to prevent overpressure. After the process is complete, it seals almost gas-tight to maintain the protective gas atmosphere in the working space.

This reduces purging cycles and lowers gas consumption.

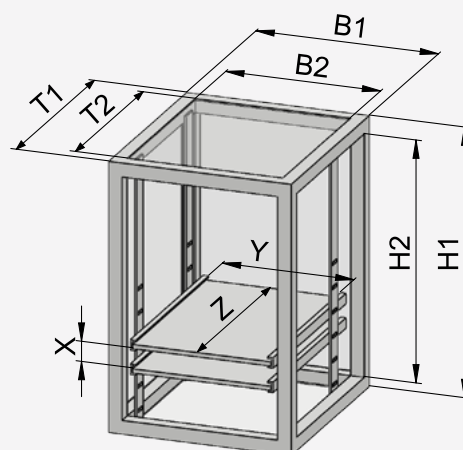


Usable and Working Space

Get an overview of the available surface area per shelf in our desiccators. Our table makes it easier to determine the storage capacity for your products. Please note the maximum shelf load and total load of each model to avoid overloading and to design your storage efficiently.

Usable and Working Space

With the help of the following table, you can easily determine what surface area is available per shelf and whether it is sufficient for storing your intended products. When determining the number of shelves, please also note the maximum load per shelf and the total load of the desiccator, as specified in the product description for each model, which must not be exceeded.



B1 External width

B2 Internal width

H1 External height

H2 Internal height

T1 External depth

T2 Internal depth

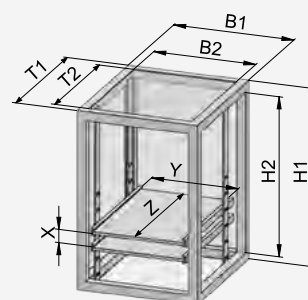
X Clearance between two shelves

Y Usable surface width

Z Usable surface in depth

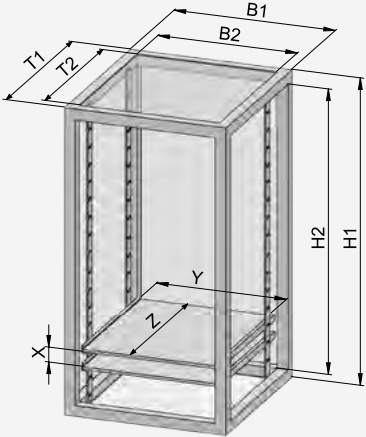
SICCO Usable areas and footprints for Star Desiccators

Star Desiccators	Star Antistatic and Vitrum Desiccators	Star Horizontal and Horizontal Vitrum Desiccators	Star Tower Desiccator	Star Double Desiccator
Article No.	Article No.	Article No.	Article No.	Article No.
V 1830-07	V 1823-07	V 1821-07	V 1938-07	V 1930-07
V 1871-07	V 1825-07	V 1899-07		
V 1875-07	V 1841-07			
V 1877-07				
V 1879-07				
V 1891-07				
mm	mm	mm	mm	mm
B1 304	B1 304	B1 520	B1 304	B1 611
B2 264	B2 264	B2 480	B2 264	B2 571
H1 520	H1 520	H1 304	H1 730	H1 520
H2 480	H2 480	H2 264	H2 690	H2 480
T1 350	T1 350	T1 350	T1 350	T1 350
T2 310	T2 310	T2 310	T2 310	T2 310
X 11,5	X 11,5	X 13,5	X 11,5	X 7,5
Y 245	Y 245	Y 460	Y 245	Y 552
Z 320	Z 320	Z 320	Z 320	Z 320

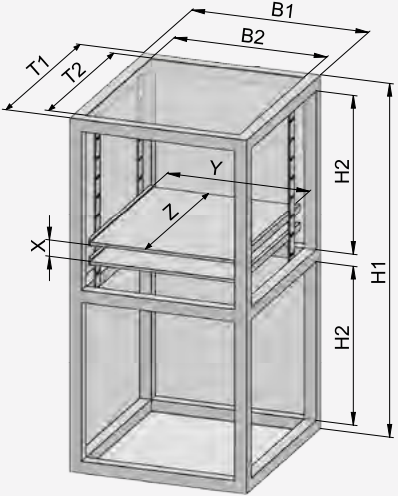


SICCO Usable and Working Space for **Maxi 1 Desiccators**

Maxi 1 Desiccators	Maxi 1 Vitrum and Antistatic Desiccators	Maxi 1 Horizontal Desiccator	Trolley Desiccator
Article No.	Article No.	Article No.	Article No.
V 1852-01	V 1846-07	V 1835-07	V 1760-07
V 1852-01	V 1846-07		
V 1914-01			
V 1927-07			
V 1932-01			
V 1936-07			
mm	mm	mm	mm
B1	B1	B1	B1
552	552	1080	600
B2	B2	B2	B2
502	502	1030	550
H1	H1	H1	H1
1080	1080	525	900
H2	H2	H2	H2
1030	1030	502	850
T1	T1	T1	T1
552	552	552	400
T2	T2	T2	T2
502	502	502	350
X	X	X	X
39	17	39	17
Y	Y	Y	Y
479	479	1006	527
Z	Z	Z	Z
515	515	515	365


SICCO Usable and Working Space for **Maxi 2 Desiccators**

Maxi 2 Desiccators	Maxi 2 Vitrum and Antistatic Desiccator	Desiccator Walls	Desiccator Wall Antistatic
Article No.	Article No.	Article No.	Article No.
V 1853-01	V 1923-07	V 1994-08	V 1997-08
V 1916-01	V 1845-07	V 1995-08	
V 1928-07		V 1996-08	
V 1933-01			
V 1937-07			
mm	mm	mm	mm
B1	B1	B1	B1
552	552	1080	1080
B2	B2	B2	B2
502	502	502	502
H1	H1	H1	H1
1080	1080	1607	1607
H2	H2	H2	H2
502	502	502	502
T1	T1	T1	T1
552	552	552	552
T2	T2	T2	T2
502	502	502	502
X	X	X	X
39	17	39	17
Y	Y	Y	Y
479	479	479	479
Z	Z	Z	Z
515	515	515	515



SICCO Usable and Working Space for **Big Star Desiccators****Big Star Desiccators**

Article No.
V 1894-07
V 1896-07
V 1926-07
V 1935-07
V 1939-07

mm	
B1	552
B2	502
H1	552
H2	502
T1	552
T2	502
X	39
Y	479
Z	515

Big Star Vitrum and Antistatic Desiccator

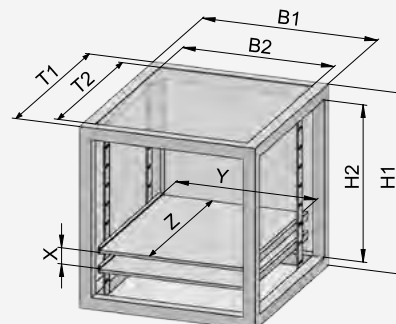
Article No.
V 1844-07
V 1925-07

mm	
B1	552
B2	502
H1	552
H2	502
T1	552
T2	502
X	17
Y	479
Z	515

Big Star Low Desiccator

Article No.
V 1897-07

mm	
B1	552
B2	502
H1	330
H2	280
T1	552
T2	502
X	39
Y	479
Z	515

SICCO Usable and Working Space for **Mini Desiccators****Mini Desiccators**

Article No.
V 1840-06
V 1842-06
V 1843-06
V 1847-06
V 1848-06
V 1849-06
V 1850-01
V 1850-02
V 1850-03

mm	
B1	214
B2	196
H1	170
H2	156
T1	183
T2	181
X	
Y	
Z	

Mini Premium Desiccators

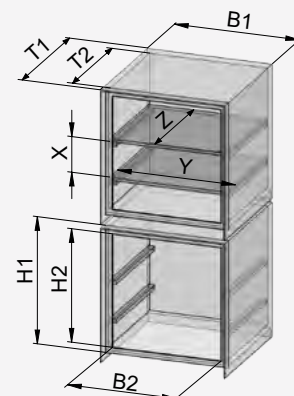
Article No.
V 1940-06
V 1942-06
V 1943-06
V 1947-06
V 1948-06
V 1949-06
V 1950-01
V 1950-02
V 1950-03

mm	
B1	214
B2	196
H1	170
H2	156
T1	183
T2	181
X	50
Y	208
Z	178

Mini Vitrum Desiccator

Article No.
V 1811-07

mm	
B1	212
B2	182
H1	177
H2	147
T1	189
T2	183
X	80
Y	200
Z	182

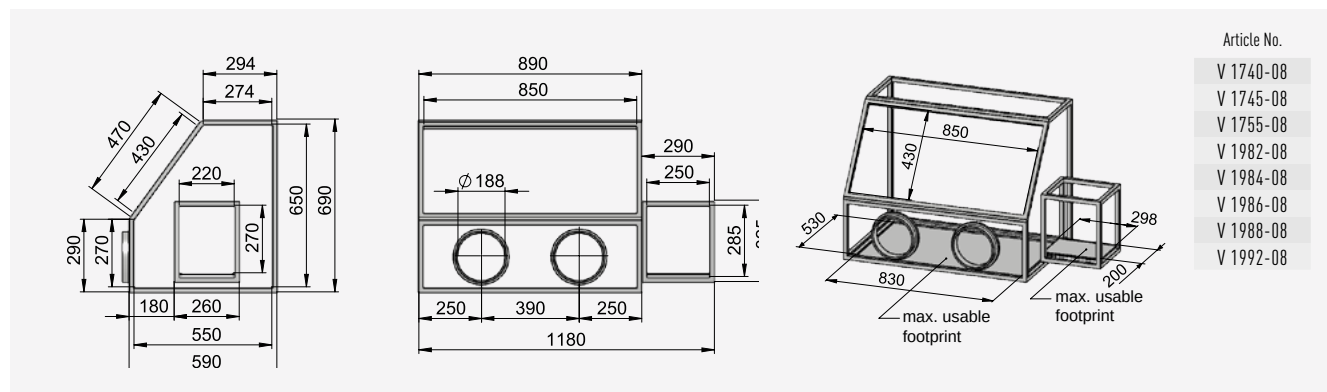


SICCO Usable and Working Space for **Glove Box with and without Transfer Chamber**

Article No.: **V 1982-08**

Internal dimensions without door and attachments, showing the max. usable footprint in mm

Dimensions apply to:

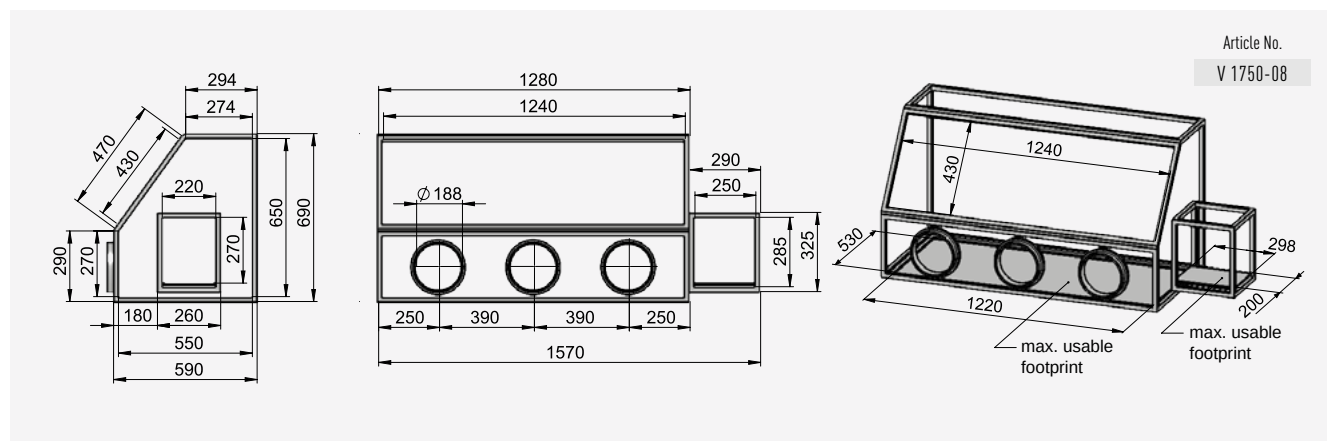


SICCO Usable and Working Space for **Glove Box Trio with and without Transfer Chamber**

Article No.: **V 1982-08**

Internal dimensions without door and attachments, showing the max. usable footprint in mm

Dimensions apply to:

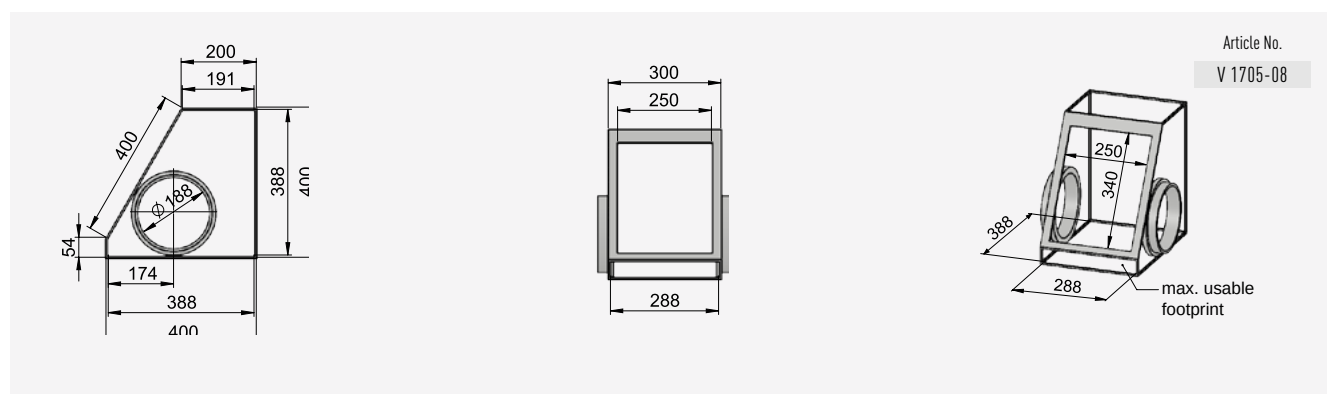


SICCO Usable and Working Space for **Mini Glove Box**

Article No.: **V 1705-08**

Internal dimensions without door and attachments, showing the max. usable footprint in mm

Dimensions apply to:

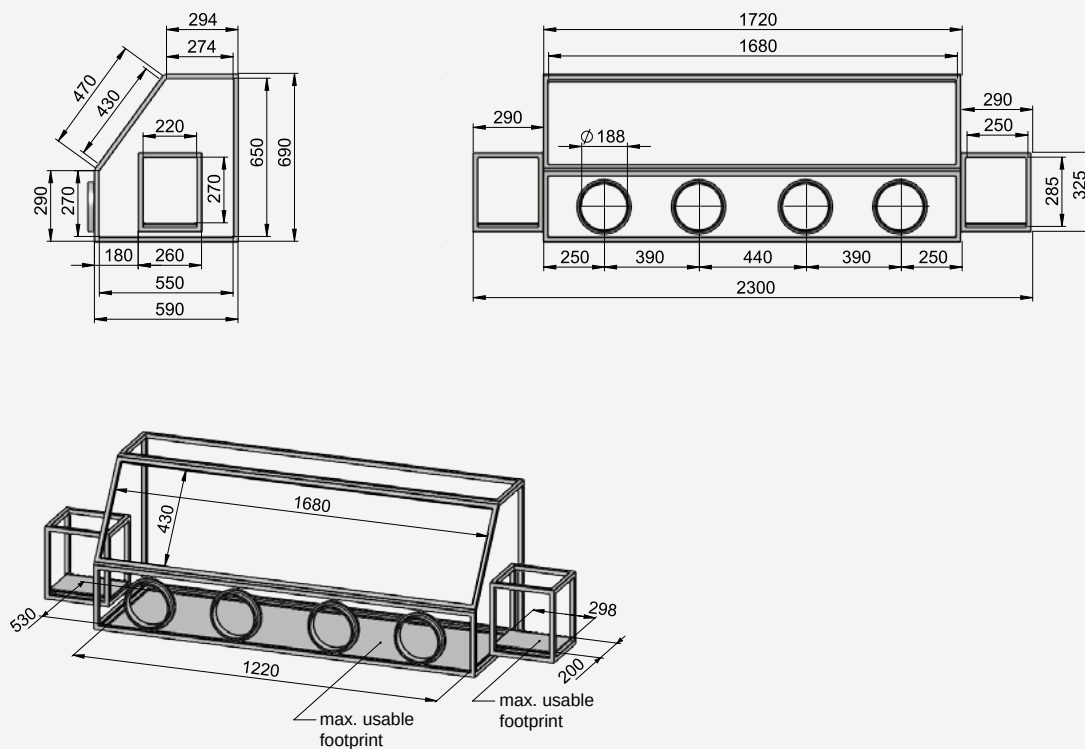


SICCO Usable and Working Space for Glove Box Duo 1 with Transfer Chamber

Article No.: **V 1730-08**

Internal dimensions without door and attachments, showing the max. usable footprint in mm

Dimensions apply to:

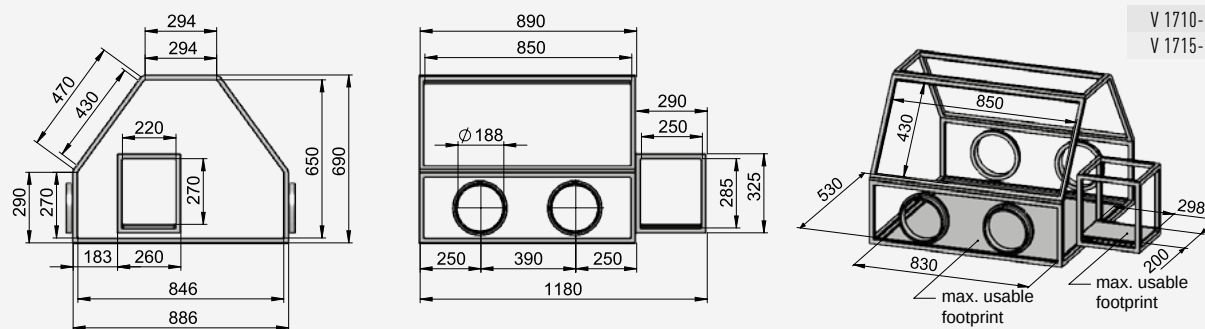


SICCO Usable and Working Space for Glove Box Duo 2 with Transfer Chamber

Article No.: **V 1710-08**

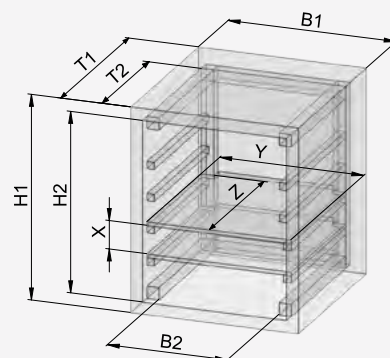
Internal dimensions without door and attachments, showing the max. usable footprint in mm

Dimensions apply to:



SICCO Usable and Working Space for Vacuum Desiccators

Vacuum 1 Desiccator	Vacuum 2 Desiccator	Vacuum 3 Desiccator	Vacuum Toplayer Desiccator
Article No. V 1880-04	Article No. V 1880-08	Article No. V 1880-12	Article No. V 1882-02
mm	mm	mm	mm
B1 300	B1 300	B1 315	B1 250
B2 220	B2 220	B2 225	B2 210
H1 300	H1 400	H1 510	H1 250
H2 260	H2 360	H2 460	H2 210
T1 280	T1 280	T1 285	T1 250
T2 240	T2 240	T2 240	T2 210
X 60	X 60	X 55	X
Y 260	Y 260	Y 260	Y
Z 230	Z 230	Z 230	Z



Grid and Guide Rail

With the numbered grid and guide rail system of the SICCO Star series, you can position your shelves easily and quickly. Testing until the shelf is positioned exactly horizontally is no longer necessary. The consecutive numbering on the rail system also helps you to document your experimental setup.



Cleaning Desiccators

For proper cleaning, use a soft cloth or a sponge (no microfiber) so that the panels do not get scratched. Glass cleaners or pH-neutral cleaners have proven effective. There are also special antistatic plastic cleaners and care products; they additionally prevent the electrostatic charging of the panels. As a result, fewer dust and airborne particles are attracted. Never use harsh cleaning agents containing acetone, benzene, or carbon tetrachloride. These substances attack the surface and can soften or cloud it.

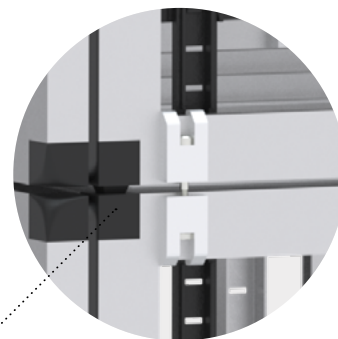
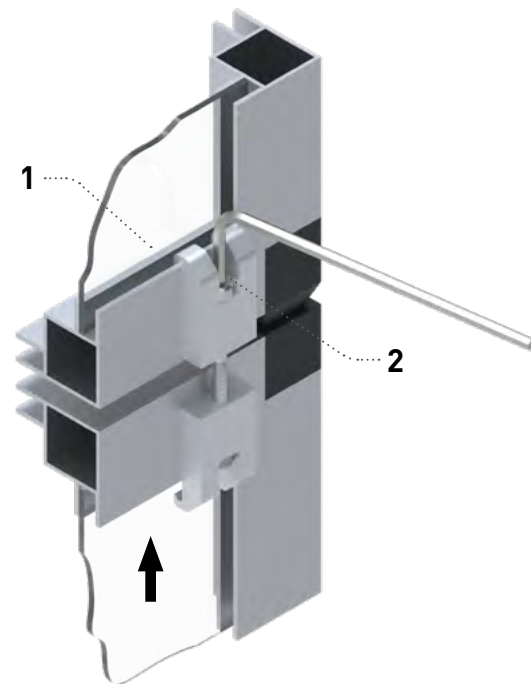


Stacking Desiccators Safely

With SICCO desiccator connectors, you can easily connect stacked drying cabinets firmly, regardless of whether you want to stack two devices of the Star, Big-Star, or Maxi size on top of each other.

On each side, a pair of clamps is hooked into the frame profile (1) at the front and back of the upper and lower units. Using a hexagon socket cylinder screw (2) and a suitable Allen key, the clamps are securely fixed, and the upper desiccator is secured against tipping and slipping.

More on Page [120](#)



Due to the design, assembly can be carried out at any time later without great effort. Only with Big-Star and Maxi-Desiccators do the rubber feet or casters have to be removed from the upper unit, but this does not require great manual skill.

Desiccator Connectors
Art. No. V 1953-07 on page [120](#)



Secure **Wall Mounting**

For a space-saving solution, we offer the wall mounting set for SICCO Star Desiccators. This allows to easily attach your desiccator to the wall without complicated assembly. The set contains all the necessary parts such as wall rails, hook rails, screws, and an Allen key.

With our 1:1 scale drilling template, you can quickly find the ideal position for mounting. Then, the hook rails are attached to the desiccator and hooked into the wall rails. Two additional screws provide stability and prevent slipping.



More on Page 120



Wall Mounting Set

Art. No. V 1777-07 on Page 120



Basics **Silica Gel Regeneration**

Structure and function

Silica gels have an amorphous, disordered microstructure and thus a wide pore radius distribution. Due to their polarity, silica gels belong to the hydrophilic adsorbents, which is expressed in their affinity for dipole molecules, such as water. Since adsorption by silica gel is a physisorption, the water is bound to the surface by the not very strong van der Waals forces. The adsorbed water remains chemically unchanged and can be easily released again.



Color change of silica gels

pH indicators, which belong to the organic dyes, are used as indicators. These have the character of weak acids or bases. The acid has a different color than the corresponding base. For silica gels, this means that as the water content increases, the pH value rises, and the color changes from orange to dark brown to black. This process is reversible, so the original color can be restored by changing the pH value.



Aging through regeneration

If narrow-pored, colorless silica gel is regenerated with a temperature of 150°C for testing purposes, the equilibrium loading decreases by approx. 20 % after 100 cycles and the half-value diffusion coefficient by 32 %, while the dry weight increases by approx. 2 %.

It is interesting that at about 100 cycles, a limit value is reached in the decrease of the equilibrium loading and the apparent diffusion coefficient, which is not significantly undercut up to 500 cycles. This means that after the hundredth cycle, the pore structure is no longer significantly changed by the thermal treatment.

More on Page [115](#)

Using desiccant correctly

The SICCO desiccant removes moisture from the air in the desiccator most quickly when you spread it over the largest possible surface area. The included desiccant tray is best suited for this.

Make sure not to pile the desiccant higher than one centimeter. If you need to increase the amount of desiccant for your application, please use another tray.

500 g of SICCO desiccant can absorb up to 16 g of humidity in 24 hours.



Regeneration of the silica gel

Silica gel is provided with a color indicator that shows the saturation level of the desiccant. Orange means dried and absorbent; dark brown to black means saturated. For regeneration, place the silica gel with the included tray in the oven for 90 minutes at 90-110°C. The microwave is not suitable for this.

You must plan for 90 minutes of regeneration per centimeter of bed depth. The silica gel can also be spread over a large area on an oven shelf. Overheated desiccant is destroyed and can no longer be regenerated. Please store any unused silica gel in an airtight container.



More on Page [115](#)

Air Humidity in the Desiccator

Dehumidification

In desiccators without automatic drying, the air humidity is lowered by introducing silica gel. This desiccant has the property of binding moisture from the ambient air. If the desiccant is saturated, it can be regenerated. If the air humidity does not drop as desired, the silica gel is already saturated, or you are using too little silica gel for your application. Increase the amount. Check whether the door is closing properly or if the circumferential seal is damaged. Check the display values of the built-in hygrometer using a reference hygrometer. If the achieved residual humidity is outside the measuring range, the built-in hygrometer cannot display correct values. Information on the measuring range can be found on page [156](#).



Reducing Air Humidity in the Desiccator More Quickly

For better air circulation and thus a faster decrease in residual humidity, you can place a small fan inside your desiccator. The power can be supplied wirelessly via solar cells in the desiccator or via a cable connection to an external power source. Normally, the cables of a transformer are thin enough to be passed through the door seal on the hinge side without any problems. For thicker cables with earthed plugs, the SICCO cable leads-in helps, which can be easily installed in SICCO desiccators when newly manufactured.



Reducing Air Exchange

When the door is opened, the more humid ambient air mixes with the dry air inside the desiccator. To keep this air exchange as low as possible, simply place larger vessels and set-up parts at the front. This artificial barrier reduces air penetration. For empty shelves, you can also tape the gaps with paper or foil to reduce air circulation.



Hygrometers and their Accuracy

SICCO hygrometers are functional, digital display instruments that approximately show the humidity in the desiccator and offer a very good price-performance ratio.

However, they are not calibrated precision hygrometers. Especially at a relative humidity below 25 %, the displayed values can deviate and tend to be higher than the actual humidity. For example, the device may display 24 % when the correct value is 20 %, or display 19 % when the value is actually below 9 %.

For exact values, a separate thermo-hygrometer (3) (see article number V 1859-08) is required, which can be additionally placed in the desiccator. Information on the measuring ranges and maximum measurement errors of the individual models can be found in the table.

More on Page 116

Measuring Ranges and Tolerances

1 Electronic Thermo Hygrometer V 1863-07

Measuring Range	Max. Measurement Error
Temperatur -10 to +60 °C	+/- 1 °C at -10 to +50 °C
Air humidity 10 to 99 %	r.F. ± 5 % r.F. at 25-75 % r.F. and 0-50 °C

2 Electronic Thermo Hygrometer V 1866-07

Measuring Range	Max. Measurement Error
Temperatur -10 to +60 °C	+/- 1 °C at -10 to +50 °C
Air humidity 10 to 99 %	r.F. ± 5 % r.F. at 25-75 % r.F. and 0-50 °C

3 Electronic Thermo Hygrometer V 1859-08

Measuring Range	Max. Measurement Error
Temperatur -10 to +60 °C	+/- 0,5 °C at -10 to +70 °C
Air humidity 10 to 99 %	r.F. ± 2 % r.F. at 25-75 % r.F. and -40 to 50 °C



SICCO Cable Leads-In

With the SICCO Cable leads-in, you can operate electrical devices with permanently attached cables and plugs (e.g., Schuko type) inside a desiccator. Our cable leads-in allows you to pass the entire cable with its plug through a desiccator wall. The plug does not need to be disassembled for this. Any cable between 0.1 mm and 10 mm in diameter is securely fixed and sealed, regardless of whether it is a flat cable, a multi-core cable, or a cable with an irregular cross-section.

Simple Installation of the Cable Leads-In



1. Loosen four front screws



2. Spread the middle parts



3. Pass the cable through



4. Screw together

More on Page [121](#)



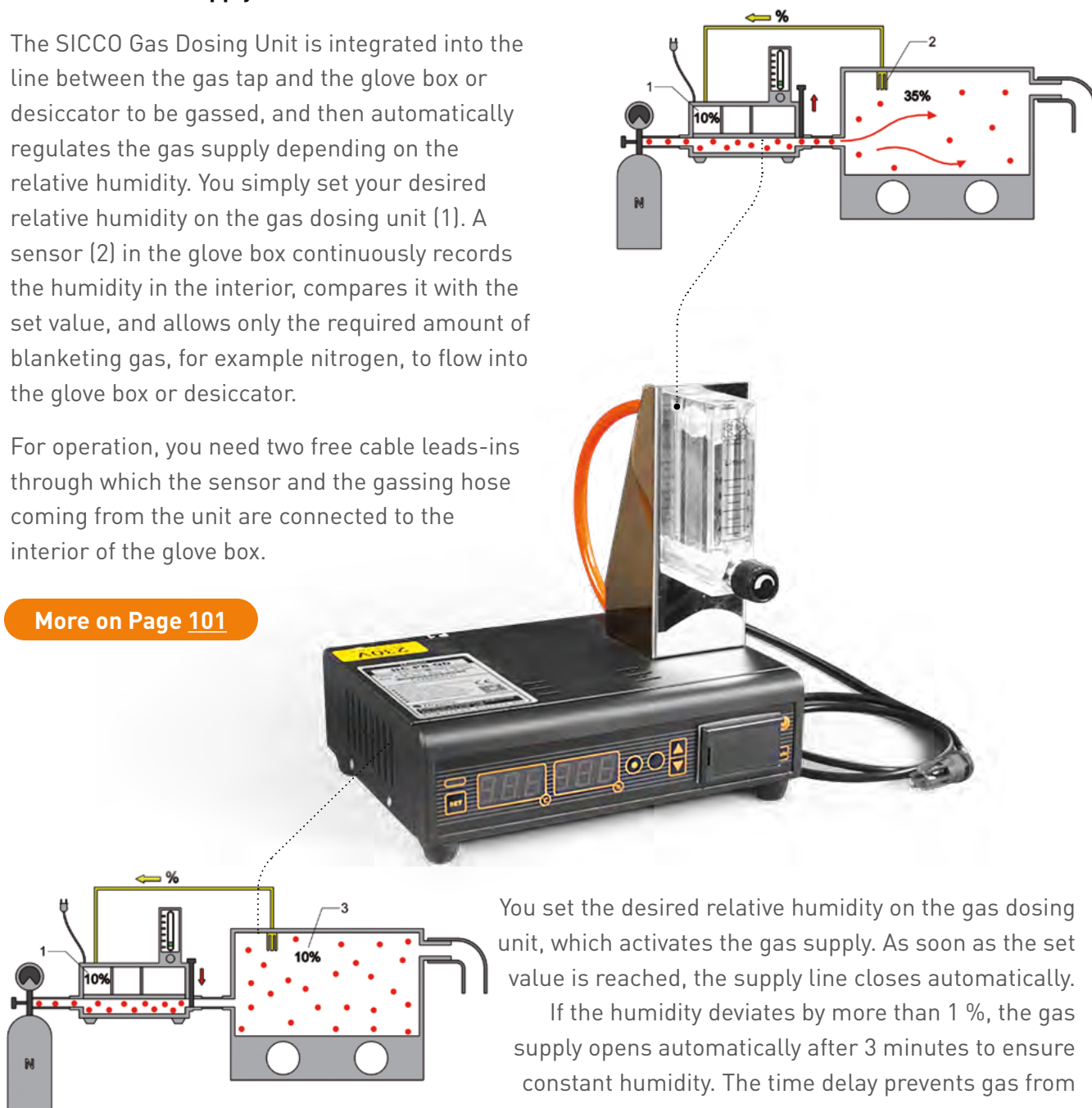
SICCO Gas Dosing Unit

Automated Gas Supply

The SICCO Gas Dosing Unit is integrated into the line between the gas tap and the glove box or desiccator to be gassed, and then automatically regulates the gas supply depending on the relative humidity. You simply set your desired relative humidity on the gas dosing unit (1). A sensor (2) in the glove box continuously records the humidity in the interior, compares it with the set value, and allows only the required amount of blanketing gas, for example nitrogen, to flow into the glove box or desiccator.

For operation, you need two free cable leads-ins through which the sensor and the gassing hose coming from the unit are connected to the interior of the glove box.

More on Page 101



You set the desired relative humidity on the gas dosing unit, which activates the gas supply. As soon as the set value is reached, the supply line closes automatically.

If the humidity deviates by more than 1 %, the gas supply opens automatically after 3 minutes to ensure constant humidity. The time delay prevents gas from being introduced, for example, during a brief door opening.

Alarm on Humidity Increase

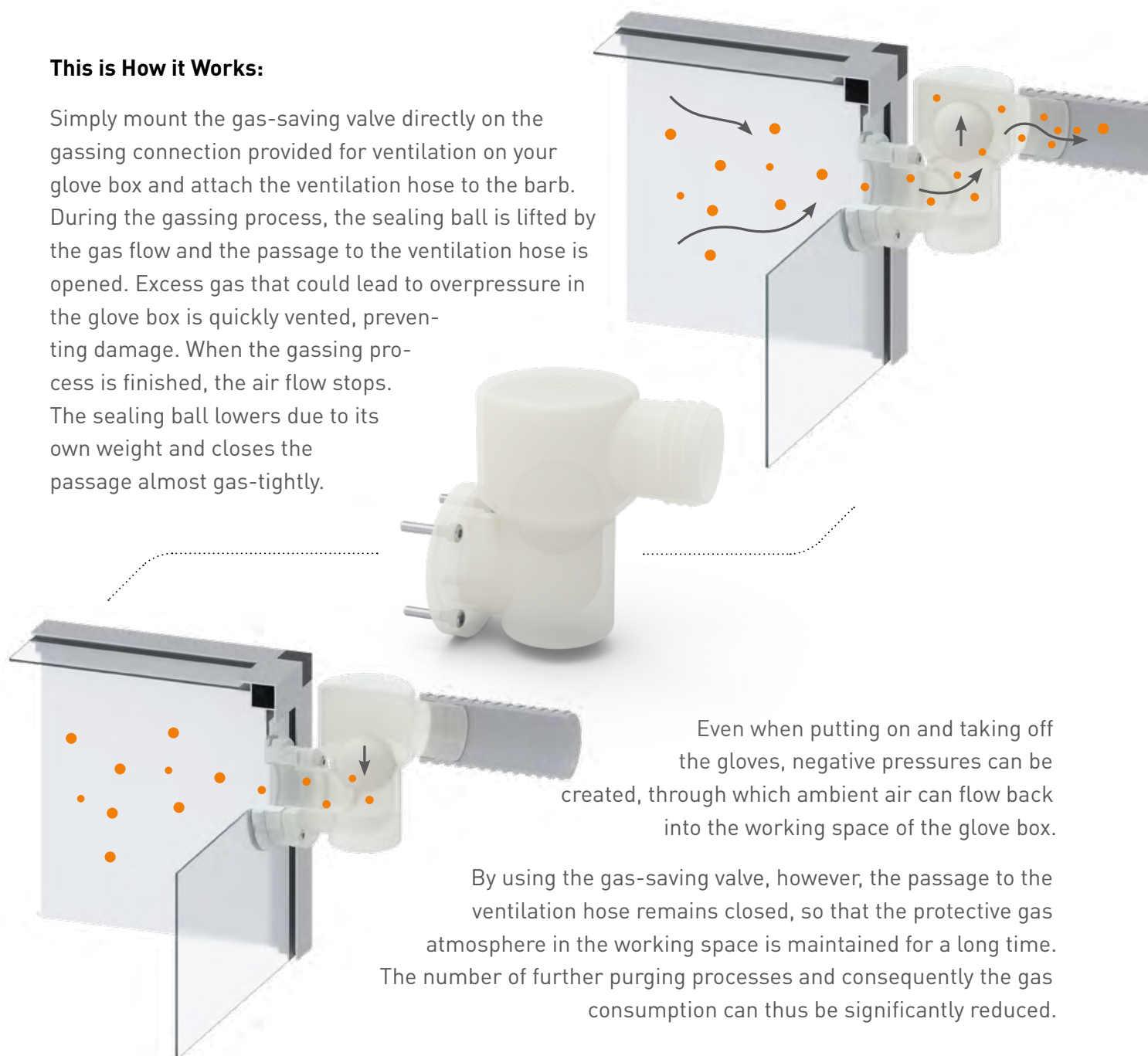
For the safety of yourself and your products, an acoustic alarm is triggered if the detected humidity in the glove box or desiccator deviates by more than 5 % from the set value. You can then immediately take countermeasures. The SICCO Gas Dosing Unit not only increases safety but also reduces your monitoring time to a minimum.

SICCO Gas Saving Valve

With the SICCO Gas Saving Valve, you significantly reduce the gas consumption in your glove box. The operating principle is very simple: depending on the flow rate of the blanketing gas passing through, the valve passage is opened; otherwise, it is almost gas-tightly closed. A complicated control system and additional power supply can therefore be omitted.

This is How it Works:

Simply mount the gas-saving valve directly on the gassing connection provided for ventilation on your glove box and attach the ventilation hose to the barb. During the gassing process, the sealing ball is lifted by the gas flow and the passage to the ventilation hose is opened. Excess gas that could lead to overpressure in the glove box is quickly vented, preventing damage. When the gassing process is finished, the air flow stops. The sealing ball lowers due to its own weight and closes the passage almost gas-tightly.



Even when putting on and taking off the gloves, negative pressures can be created, through which ambient air can flow back into the working space of the glove box.

By using the gas-saving valve, however, the passage to the ventilation hose remains closed, so that the protective gas atmosphere in the working space is maintained for a long time. The number of further purging processes and consequently the gas consumption can thus be significantly reduced.

More on Page [105](#)

Properties of Gloves for Glove Boxes

Natural Rubber:

The natural rubber glove is the standard glove in the laboratory sector. It can be used in the fields of life sciences (pharmacy, medicine/laboratory) and in the nuclear industry. It protects against certain mechanical and chemical risks, against radioactive contamination, as well as against microorganisms and viruses.

Additionally, the natural rubber glove can be used in ozone-containing atmospheres. However, there is no protection against ionizing radiation.

More on Page 120

Article No.:	V 1972-07/-08/-09
Temperature Application Range	-40° C - +80° C
Material	Natural rubber (Polyisoprene)
Softness	+++ recommended
Tear resistance	++ suitable

Chemical resistance:

UV Radiation, Ozone	not recommended
Alcohols	++ suitable
Acids/Bases	++ suitable
Strong Oxidants	not recommended
Ketonic Solvents	usable (limited)
Chlorinated Solvents	not recommended
Aromatic Solvents	not recommended
Fatty Solvents	not recommended
Shelf Life/Storage	2 years, in original packaging at +5°C to +25°C, do not store near electrical equipment to prevent accelerated aging.
Cleaning Instructions	wash with soapy water, rinse with clear water, air dry at a low temperature (max. 40°C) and treat with talcum powder.

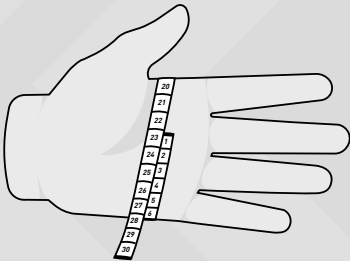


Suitable Glove Size

You can find the right size based on the hand circumference.

Size:	7	8	9
mm	223	240	251
Article No.	V 1972-07	V 1972-08	V 1972-09

Hand Circumference



Properties of Gloves for Glove Boxes

EPDM Antistatic:

The gloves can be used in the fields of life sciences (pharmacy, medicine/laboratory), in the nuclear industry, and in ATEX environments. They protect against certain mechanical and chemical risks, against radioactive contamination, as well as against microorganisms and viruses.

Additionally, they can be used in ozone-containing atmospheres and offer the primary property of dissipating electrostatic charges. However, there is no protection against ionizing radiation.

More on Page [120](#)



Article No.:	V 1974-09
Temperature Application Range	-30° C - +120° C
Material	Ethylene-Propylene-Diene-Monomer (EPDM)
Vertical Resistance	2,60E+04 Ohm (Antistatic 10 ⁸ Ohm)
FDA	yes, (CFR21 § 177.2600)
Softness	++
Tear Resistance	+

Chemical Resistance:

UV Radiation, Ozone	not recommended
Alcohols	recommended
Acids/Bases	recommended
Strong Oxidants	recommended
Ketonic Solvents	recommended
Chlorinated Solvents	not recommended
Aromatic Solvents	not recommended
Fatty Solvents	not recommended
Shelf Life/Storage	3 years, in original packaging at +5°C to +25°C, do not store near electrical equipment to prevent accelerated aging.
Cleaning Instructions	wash with soapy water, rinse with clear water, air dry at a low temperature (max. 40°C) and treat with talcum powder.

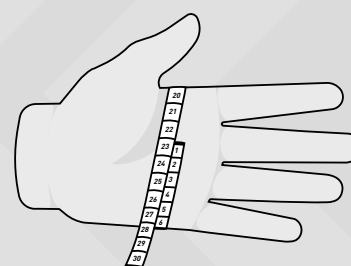


Suitable Glove Size

You can find the right size based on the hand circumference.

Size:	10,5
mm	282
Article No.	V 1974-09

Hand Circumference



SICCO Iris Ports

For quick access to the working space and for applications that do not require a protective gas atmosphere in the glove box, SICCO Iris Ports are a real alternative to mounted work gloves. The entries consist of a sturdy polyethylene ring in which two cross-slotted silicone discs are mounted. The silicone discs overlap for easy access and minimized air exchange when not in use.



More on Page [121](#)



The Assembly of the Iris Ports

First, the gloves are pulled off the retaining ring. Then you place the white silicone ring into the groove of the port opening. Finally, the Iris Port is attached by simultaneously turning and pressing.



2



Advantage

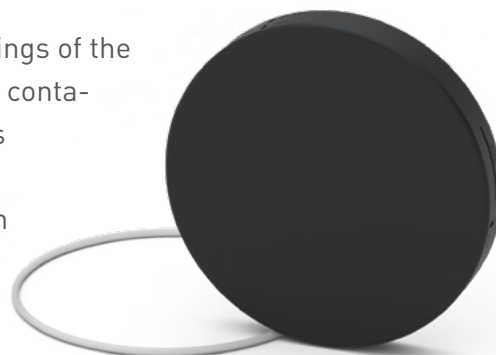
You have direct access to the working space without the tedious process of putting on and taking off the work gloves.



SICCO Closing Lid

Without mounted work gloves or Iris Ports, the port openings of the SICCO glove box remain open, which can lead to potential contamination in the working space or the escape of hazardous dusts and particles. The SICCO closing lid offers a simple solution: it is screwed over the openings and secured with a silicone cord, but without providing a gas-tight seal.

More on Page [121](#)



+ **Advantage**

Simple assembly to avoid contamination of the working space and the surroundings.



+ **The assembly of the Closing Lids**

The assembly of the closing lid is simple: First, remove the Iris Ports. The silicone ring can remain in place. Then, you attach the closing lid by turning and pressing.



SICCO **Use and Resistance of Desiccators and Glove Boxes**

SICCO products are designed for specific purposes, but their functional construction offers a wide range of possible applications.

Desiccators: The main function is the storage of moisture-sensitive substances.

Glove Boxes: These are designed for handling (e.g., weighing, mixing, packaging, processing, and testing) of sensitive substances or substances unsuitable for humans.

It is important to understand that a desiccator is not a substitute for a safety cabinet for storing chemicals.

Resistance and Important Influencing Factors

The chemical resistance, especially of the acrylic glass used (known as Plexiglas), is a crucial factor that depends on many conditions. A general resistance table can therefore not be created, and individual testing is essential.

- **What Does Resistance Depend On?**
- **Influencing factors:** The material's reaction is influenced by the storage duration, temperature, concentration, and quantity of the introduced substances.
- **Affected components:** Not only the acrylic glass is relevant, but also the aluminum frame, sealants (silicone), door seals, magnetic tapes, material of the hygrometer, the shelf, as well as the guide and grid rails.

- **State of the Substances:** The interaction depends on whether substances are solid, liquid, gaseous, or evaporating, and whether they have direct contact (e.g., on shelves) or are stored in closed containers.

Possible Consequences of Incompatibility

If the material is not compatible with a substance, various problems can occur. These include:

- **Opacity and dull or white finishes**
- **Softening or swelling of the material**
- **Discoloration on the components**
- **Stress corrosion cracking**
(e.g., upon contact with alcohols)

It is therefore advisable to carefully check the resistance for the chemicals you use under the specific operating conditions to ensure safe storage.



Also from Bohlender.

b.safe



Sophisticated Safety Solutions for HPLC.

**Simple. Better. Faster.
Directly from the
Manufacturer.**

When it comes to quality and safety, we leave nothing to chance: We develop, design, and manufacture HPLC solutions ourselves.



Request a Catalog now or find information at:
bsafe.de/en or **+49 (0) 93 46-92 86-0**

**bsafe.de/en/
products**

SICCO Materials

PMMA Acrylic Glass,

Also known under the trade name Plexiglas® of Evonik Röhm GmbH. Synthetic, glass-like thermoplastic polymer; break-resistant to impact-resistant; very good surface; glossy; good resistance to dilute acids and alkalis, limited resistance to organic solvents; flammable approximately like hard wood; very low smoke generation; combustion gases are non-toxic and non-corrosive; applicable up to approx. +70 °C; specific volume resistivity PD: $>10^{15} \Omega/\text{cm}$, test standard DIN VDE 0303, Surface resistance: $5 \times 10^{13} \Omega$, test standard DIN VDE 0303, Part 3; Transmittance tD65: -92 %, test standard DIN 5036, Part 3.

Black colored PMMA is opaque and absorbs UV radiation. The material's surface is high-gloss and resistant to aging and weathering. PMMA Black is classified in fire class B2.

PMMA Orange

Properties see above; tD65 = Transmittance according to DIN 5036 for standard illuminant D65 (daylight; approx. 6500 K, DIN 5033): 42 % . aD65 = Absorbance according to DIN 5036: 52 %.

PC

Polycarbonates are plastics from the group of synthetic polymers and the family of polyesters. Polycarbonates are transparent and colorless. However, they can be colored in any shade. They are characterized by high strength, impact resistance, stiffness, and hardness. Polycarbonates are largely resistant to the effects of weathering and radiation. They are flammable, but the flame extinguishes after removing the ignition source. In addition, polycarbonates are good insulators against electric current. They are resistant to water, many mineral acids, and aqueous solutions of neutral salts and oxidizing agents. Some non-polar organic solvents such as hydrocarbons and many oils and fats also do not attack polycarbonates. However, polycarbonates are not resistant to some chlorinated hydrocarbons, such as dichloromethane. Alkaline aqueous solutions, amines, and ammonia also attack polycarbonates.

PC-ESD

PC-ESD Polycarbonate-ESD consists of a transparent material with a uniform static dissipative coating on both sides. The dissipative property reduces particle adhesion and the generation of electrostatic fields. It complies with the standards EN 61340-5-1 and ANSI/ESD S20.20-1999.

Electrical Properties:

Surface resistance $R_s 10^5 - 10^7 \Omega$ (EN 61340-2-3)
Point-to-point resistance $R_p 10^4 - 10^6 \Omega$ (EN 61340-2-3)
Resistance to ground $R_g 10^4 - 10^6 \Omega$ (EN 61340-2-3)

Borosilicate Glass

is clear and colorless and shows no significant absorption in the visible spectrum. The permeability to UV radiation allows the products to be used for photochemical reactions. The refractive index is 1.472 (at 589.3 nm) and the photoelastic constant is $B 3.6 \cdot 10^{-6} \text{ MPa}^{-1}$. The physical properties of the glass are described in the standard DIN ISO 3585. Borosilicate glass is very resistant to alcohols, water, and acids and their mixtures, as well as to chlorine, iodine, and bromine. The action of water causes only a slight attack. A thin layer of silica glass forms on the surface, which reduces further attack.

Water resistance (according to ISO 719)
Water class 1
Acid resistance (according to ISO 1776)
Acid class 1 - 2
Alkali resistance (according to ISO 695)
Alkali class 2

Aluminium

This metal is characterized by a particularly low density of 2.7 g/cm^3 (approx. 3 times lighter than steel) and is preferably used for frame profiles and shelves. When freshly processed, it is very reactive and covers itself with a protective oxide layer through reaction with substances in the environment, air, and moisture, and therefore, unlike iron, does not corrode further. However, the oxide layer is soluble in both acids and alkalis. Direct contact with chemicals should therefore be avoided.

Stainless Steel

Shelves, plates, trays, or protective trays as a safeguard against leakage are common applications for stainless steel. The material has a very good thermal conductivity compared to plastics. The high corrosion resistance is achieved by alloying with the metal nickel. Besides its use in contact with food, stainless steel is also suitable for applications in the pharmaceutical or biotechnology sectors. Only contact with high-purity chemicals from the semiconductor industry should be avoided, as this can lead to an undesirable introduction of metal ions.

Silica Gel

is an amorphous silicic acid of gel-like, rubbery to solid consistency and is colorless. It has a large internal surface area. It is highly hygroscopic (water-attracting) and is suitable as a gelling agent, filter material, adsorption material, and desiccant; mixed with an indicator, the silica gel changes color when it has bound water; the gel remains free-flowing and dimensionally stable even when exhausted. It can be regenerated by placing it on a metallic wire rack or baking sheet at about $90 - 110 \text{ }^\circ\text{C}$ (a microwave oven is not suitable for this!).

SICCO Materials

EPDM Cellular Rubber

This particularly soft-adjusted product is used, for example, for the sealing tape on desiccator doors. It is produced using the so-called expansion process and thus has cells inside the product that are not interconnected. Therefore, seals/components that are cut out from a precursor product do not lose their ability to seal. With a density of approx. 0.13g/cm³, EPDM cellular rubber is extremely light and an excellent thermal insulator due to its extremely low thermal conductivity of approx. 0.04W/mK. The service temperature is, however, limited to the range of -40 °C to +100 °C (briefly +120 °C).

It is resistant to many acids and alkalis in common concentrations, potassium and sodium compounds (e.g., saline solution), aqueous alum, detergents, photochemicals, cold ammonia, acetylene, alcohols, glycol-based antifreeze, and ozone or silicone oil. It is not resistant to hydrocarbons (oils, fats, gasoline), chlorinated hydrocarbons such as dichloromethane or tetrachloroethene, as well as nitro compounds and concentrated nitric or hydrochloric acid.

Silicone Natural

This elastomer with very good permanent elastic properties is characterized by a very broad application spectrum. It is used as a neutral-curing 1-component silicone adhesive and sealant on an alkoxy basis, for example, for sealing plastic and glass panels, for seals in Cable leads-ins, or the entries at the Iris-Port. In particular, compatibility with stress-free acrylic glass can be confirmed. During curing, small amounts of alcohols are released, which is why good ventilation must be ensured during processing. Due to the interaction of the cured natural silicone with chemicals in liquid or gaseous form, such as substances containing iodine, bromine, or aldehyde, discoloration may occur on the sealant. Therefore, tests may need to be carried out in advance of an application.

Silicone Dissipative

It is used for sealing panels, for gaskets in Cable leads-ins or the entries at the Iris-Port, as well as other applications where electrostatic discharge is required. The dissipative property is achieved by adding carbon black particles. The specific volume resistivity ρ according to DIN EN ISO 3915 (1999) is approx.

0.25Ωcm. During curing, small amounts of oxime compounds are released, which is why good ventilation must be ensured during processing. For materials that are subsequently processed in contact with dissipative silicone, the user should clarify in advance that their ingredients do not lead to any impairment or change (e.g., discoloration) of the product.

NR Natural Rubber (Polyisoprene)

Natural Rubber (NR) is used for gloves and other products with highly elastic properties. NR is the starting product of the rubber product family and is supplemented on the one hand by silicone elastomers, which are particularly characterized by good elasticity at low temperatures, or by fluoroelastomers (FKM) or perfluoroelastomers (FFKM), which are mainly used at high temperatures or in direct contact with aggressive chemicals.

NR is resistant to high-energy radiation. Therefore, the products made from it can be sterilized by gamma-sterilization and are particularly suitable for the food, pharmaceutical, and nuclear industries. As an alternative, sterilization in an autoclave up to 120 °C is also suitable for preparing sterile products.

At temperatures < -40 °C, NR loses its elasticity; the maximum service temperature should not exceed +80 °C. Thanks to its resistance to alcohols, acids, and bases, NR is very versatile.

EPDM Dissipative

This synthetic rubber, made dissipative by means of carbon black particles, is used for example in gloves. These are used when electrostatic charges must be safely avoided upon contact. Therefore, it is particularly suitable for use in explosion-proof applications (volume resistance $4.8 \times 10^4 \Omega\text{cm}$, DIN EN 1149-2, meets ATEX requirement) and in the electronics industry. The ingredients conform to the current FDA positive list. These apply to the criteria of the pharmaceutical, medical, and food markets. EPDM dissipative can be steam-sterilized multiple times without becoming sticky. However, the maximum possible service temperature must not be exceeded. At temperatures < -20 °C, EPDM loses its elasticity; the maximum service temperature should not exceed +130 °C. The material is halogen-free and resistant to many oxidizing media.

PA-Glass Fiber Black

This glass-fiber reinforced thermoplastic is used in particular in corner connectors, hinges, or guide rails. Due to its high strength, PA-glass fiber is preferably suitable for construction parts. Thanks to additional stabilization, it has a very high resistance to hydrolysis in conjunction with a continuous service temperature of approx. 130 °C and good resistance to most acids. However, the material should not come into contact with hydrofluoric acid or medium to strong bases. It is also characterized by excellent insulation properties. Direct contact with open flames should be avoided due to its flammability.

SICCO Materials

PP-Natural

Gas-saving valves or Cable leads-ins are products made from PP-natural. The thermoplastically processable polypropylene exhibits high hardness and rigidity, is resistant to stress cracking, and shows better recovery properties. However, its toughness is limited at low temperatures. The continuous service temperature is at +110°C; short-term use up to +140°C is possible. The electrical insulation properties are excellent, with a specific volume resistivity of 10^{17} to 10^{18} Ohm x cm. However, PP-natural is flammable and therefore must not be brought into direct contact with open flames. The material is chemically resistant to aqueous solutions of inorganic salts as well as almost all inorganic acids and bases, even at elevated concentrations and at temperatures up to 60°C. PP-natural is attacked by oxidizing chemicals such as oleum, concentrated nitric acid, or halogens. Thanks to its good radiation resistance, it is sterilizable with high-energy radiation, e.g., with gamma radiation.

PP-Black

This colored, non-conductive thermoplastic material is used for Iris Ports, exhaust nozzles in the Glove Box, or for the power box on Auto-Desiccators. The black pigmentation serves in particular for better recognition of the plastic parts (e.g., in comparison to Plexiglas) and does not significantly alter the properties of the plastic. Properties and application recommendations therefore largely correspond to those of PP-natural. Through contact with chemicals, the black color can change during use or disappear completely.

PE-Conductive

By adding carbon black particles, polyethylene acquires electrostatic dissipative properties. These effectively prevent electrostatic charges. Even though this material has conductive properties (Spec. Surface resistance $< 10^4$ Ohm, DIN EN 60093, meets ATEX requirements), they are still significantly below the conductivity of metals (Spec. Surface resistance < 1 Ohm). Conductive PE is used, for example, as shelves in Mini-Desiccators or for EL Cable leads-ins. With a recommended temperature range of -20°C to +80°C, its applications are limited to areas with „extended room temperature“. The material is flammable and should therefore not come into contact with open flames.

PBTP White

Trays for silica gel in laboratory equipment are typical applications for this thermoplastically processable polybutylene terephthalate (PBTP). It is characterized by very low water absorption (0.2 – 0.5 wt%), high mechanical strength, impact resistance thanks to good impact toughness, and very good electrical insulation properties (Spec. volume resistivity $> 10^{13}$ Ohm x cm). Trays made from PBTP natural retain their shape up to approx. +165°C. The material is flammable and should therefore not be brought into contact with open flames. It is resistant to dilute acids and alkalis at ambient temperature, alcohols, hydrocarbons, ketones, ethers, mineral oils, fuels, and salt solutions.

SICCO Glossary

Relative Humidity

is the percentage ratio between the current water vapor pressure and the saturation water vapor pressure over a pure and flat water surface. Based on this, it is easy to estimate how quickly evaporation processes will occur or how great the risk of condensation is. With increasing temperature, the amount of water vapor needed for saturation increases. As a result, the relative humidity of a given air parcel decreases when heated. The specification of the temperature is therefore mandatory for the comparability of the values.

Dew Point

refers to the temperature at which a state of equilibrium between condensing and evaporating water is established on an object (in the presence of moisture), in other words, when condensation just begins to form.

Notes on the Function and Safety of Dissipative Plastics and Elastomers

Plastics and elastomers are characterized by good thermal and electrical insulation properties. If the intended use requires conductive (= high conductivity) or dissipative properties (lower conductivity is sufficient), these are in most cases achieved by adding carbon black particles. Dissipative plastics are used, for example, to avoid ignition sources from electrostatic discharge (see ATEX directive). In other applications, they protect electronic components from voltage spikes due to electrostatic discharge.

The additive material of the carbon black particles is not stable against strong oxidative attacks. In contact with atmospheric oxygen, the dissipative properties of the plastic or elastomer generally do not change. However, strongly oxidizing media such as ozone (O_3), hydrogen peroxide (H_2O_2), or strongly oxidizing acids (conc. HNO_3) can decompose the carbon black particles, causing the property of electrostatic dissipation to be lost. This is best recognizable by the fading of the original black color of the components. This filler degradation can be quantitatively tracked by testing the surface resistivity (in Ω according to IEC 60093) or the volume resistivity (in $\Omega \times cm$ according to IEC 60093). If the conductivity falls below the specified values after a certain period of use, the component should be replaced with a new one because the original component safety can no longer be guaranteed.



>more Flexibility

At SICCO, we rely on in-house design and manufacturing to respond quickly and directly to your needs. Our wide product range and the possibility of custom-made solutions guarantee a perfect solution for you.



>more Competence

Your requirements can't wait. Our products are promptly ready for shipment thanks to efficient warehousing and smooth processes. Whether desiccators, drying cabinets, or accessories - we minimize your downtime and deliver as quickly as possible.



More for you!

Discover the advantages of our products: Maximum flexibility, safety, and functionality – specially developed for your requirements.



>more Service

We have been designing and manufacturing ourselves since 1998, continuously optimized through customer feedback. Our specialists are available to provide you with comprehensive advice. Because who could provide better information than the manufacturers themselves?



>more Function

Our products should bring you as much joy as they bring us during their production. SICCO desiccators and drying cabinets convince with well-thought-out details and unique features.

>more Reliability

SICCO desiccators and drying cabinets stand for maximum safety and durability. With robust materials and modern manufacturing technology, we guarantee consistently high quality and reliability.





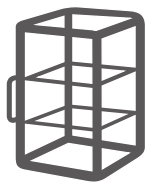
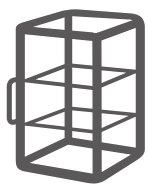


TABLE OF CONTENTS

Alphabetical Order

Accessories	110	Drip trays for Maxi 1 and 2, Star Desiccators.	114
Accessories for Drying	115	Drip trays Star Series.	112
Accessories for Drying/Mini Desiccators	114	Drying performance Desiccators	131
Accessories for Gassing	115	Drying performance test	122
Accessories for Maintenance for Star Desiccators ..	120	Drying properties	124
Accessories Gassing Desiccators	115	Exhaust Hoods	108
Accessories Glove Boxes	120	Filter unit Air Stream	102
Air humidity in the desiccator	156	Gas Dosing Unit	160
Air Ionizer	106	Gas Dosing Unit Function	160
All about SICCO	20	Gas Saving Valve	105
Antistatic Desiccators	74	Gas Saving Valve Function	161
Auto Big Star Desiccator	67	Gassing connections (Desiccators)	115
Auto Desiccators Dehumidifying system	66	Glass Desiccators	43
Auto Desiccators Wall	71	Glove Box	90
Auto Glove Box with Transfer Chamber	94	Glove Box Air Stream with Transfer Chamber	102
Auto Maxi 1 Desiccator	70	Glove Box Duo 1 with Transfer Chamber	96
Auto Maxi 2 Desiccator	70	Glove Box Duo 1 with Transfer Chambers Antistatic ..	98
Auto Star Desiccators	66	Glove Box Duo 2 with Transfer Chamber	97
Auto Star Desiccator Vitrum	67	Glove Box Duo 2 with Transfer Chamber Antistatic ..	99
Base frame for Glove Boxes	107	Glove Boxes and Exhaust Hoods	88
Big Star Desiccator	30	Glove Boxes with and without Transfer Chamber	86
Big Star Desiccator Antistatic	74	Glove Box for Extraction	92
Big Star Desiccator Black	53	Glove Box Pure with Transfer Chamber	104
Big Star Desiccator Low	31	Glove Box Trio with Transfer Chamber	93
Big Star Desiccator Protect	49	Glove Box Vitrum with Transfer Chamber	89
Big Star Vitrum Desiccator	44	Glove Box with Antistatic	91
Black Desiccators	53	Glove Box with Transfer Chamber	88
Cable leads-in	158	Gloves Antistatic	120
Cleaning Desiccators	151	Gloves, Properties	162
Closing lid for glove box ports	121	Grid and guide rails, mode of operation	151
Closing lid for glove box ports, mode of operation ..	165	Grounded Desiccators	74
Company	8	Guide to the ideal product	16
Company Presentation	20	Heated desiccators	33
Connection set for gassing Glove Box	121	Horizontal Star Desiccators	29
Connectors for Desiccators	74	Horizontal Star Desiccators Vitrum	43
Control Desiccators	69	Humidity Temperature sensor with data storage ...	117
Control-Desiccators, mode of operation	68	Hygrometer	116
Custom production	12	Hygrometer with data recording	117
Desiccant (Silica Gel)	114	In-house Production for First-Class Quality	10
Desiccators Cleaning, mode of operation	151	Iris Ports	121
Desiccator Selection Guide	16	Iris Ports, mode of operation	164
Desiccators for Drying and Storage	26	Light protected Desiccators	49
Desiccators for Gassing	56	Lockable Desiccators	36
Desiccators Wall Antistatic	77	Lowering air humidity	156
Desiccator Wall	41	Materials	168
Dissipative Desiccators	74	Maxi 1 Desiccator	30
Dissipative gloves	120	Maxi 1 Desiccator Antistatic	75
Dissipative gloves, Properties	162	Maxi 1 Desiccator Black	54
Drip trays	112	Maxi 1 Desiccator Horizontal	29
Drip trays for Desiccator Walls	114	Maxi 1 Vitrum Desiccator	44

Maxi 2 Desiccator	31	Star Desiccator Black	53
Maxi 2 Desiccator Antistatic	75	Star Desiccator Double	32
Maxi 2 Desiccator Black	54	Star Desiccator Horizontal	29
Maxi 2 Vitrum Desiccator	46	Star Desiccator Protect	49
Maxi-Desiccator Black	54	Star Thermo Desiccator	33
Maxi Desiccators Protect	50	Star Vitrum Desiccator	43
Mini Desiccator Antistatic Basic	76	Star Vitrum Desiccator Horizontal	43
Mini Desiccator Antistatic Premium	76	Super Big Star Desiccator	59
Mini Desiccator Black Basic	55	Super Desiccators Wall	61
Mini Desiccator Black Premium	55	Super Maxi 1 Desiccator	59
Mini Desiccator Mobil Premium	37	Super Maxi 2 Desiccator	60
Mini Desiccator Protect Basic	51	Super Star Desiccator	58
Mini Desiccator Protect Premium	51	Super Star Desiccator Vitrum	58
Mini Desiccators Basic	34	Technical Information	144
Mini Desiccators Black	55	Temperature and humidity sensor with data storage	117
Mini Desiccator Secure Box Basic	36	Temperature controllable Desiccators	33
Mini Desiccator Secure Box Premium	36	Temperature resistance hot	
Mini Desiccators Premium	35	materials in the desiccator	140
Mini Desiccators Premium	37	Test with Automatic Desiccator	128
Mini Glove Box	100	Test with Desiccator for Gassing	132
Mini Vitrum Desiccator	47	Test with Glove Box	134
Mobile Desiccators	37	This is what SICCO stands for	8
Modifications	12	Tips & Tricks	152
Portable Desiccators	37	Tower Star Desiccator	28
Protective tray for Glove Boxes	120	Tray for Silica gel	115
Reducing air exchange	157	Trolley Desiccator	32
Regenerating desiccant	154	Usable areas and footprints	146
Regeneration of silica gel	154	Usable areas and footprints for Maxi 2 Desiccators	147
Regeneration Silica Gel	154	Usable areas and footprints for Maxi Desiccators	147
Secure wall mounting	153	Usable areas and footprints for Mini Glove Box	148
Shelves	110	Usable areas and footprints for Vacuum Desiccators	151
Shelves and Drip trays for Tower Star Desiccators	112	Usable areas and footprints of Glove Boxes	
Shelves and Drip trays for Vitrum Desiccators	113	with and without Transfer Chamber	149
Shelves for Antistatic Star Desiccators	112	Usable areas and footprints of Star Desiccators	146
Shelves for Big Star/Maxi Desiccators	114	USB Data logger	117
Shelves for Desiccator Walls	114	Using desiccant correctly	155
Shelves for Star Desiccator Double	112	Vacuum 1 Desiccator	82
Shelves for Star Desiccators	112	Vacuum 2 Desiccator	83
Shelves Maxi 1 Desiccator Horizontal	113	Vacuum 3 Desiccator	84
Shelves Mini Desiccators	113	Vacuum Desiccators	80
Shelves Mini Desiccators	113	Vacuum Desiccator Toplader	85
Shelves Vacuum Desiccators	113	Vitrum Desiccator	43
Silica gel	115	Wall mounting of Desiccators	153
Silica gel basics	154	Wall mounting set	120
Solar energy for low-emission production	25		
Stackable Desiccators	153		
Stacking desiccators safely	152		
Stacking of desiccators, mode of operation	153		
Star Desiccator	28		
Star Desiccator Antistatic	74		



TABEL OF CONTENTS

Sorting by Article Number

V 1677-07.	69	V 1860-05.	113
V 1705-08.	100	V 1860-30.	113
V 1710-08.	97	V 1860-51.	113
V 1715-08.	99	V 1860-52.	112
V 1730-08.	96	V 1860-54.	113
V 1735-08.	98	V 1860-55.	112
V 1740-08.	104	V 1860-61.	112
V 1745-08.	102	V 1860-67.	112
V 1750-08.	93	V 1860-68.	112
V 1755-08.	94	V 1860-73.	113
V 1760-07.	32	V 1860-75.	113
V 1775-02.	101	V 1860-77.	113
V 1777-05.	120	V 1861-07.	115
V 1778-02.	120	V 1863-05.	116
V 1779-02.	120	V 1863-07.	116
V 1782-07.	120	V 1864-01.	115
V 1783-07.	120	V 1866-07.	116
V 1785-07.	120	V 1868-08.	117
V 1787-07.	105	V 1869-08.	117
V 1788-01.	106	V 1871-07.	28
V 1789-07.	120	V 1875-07.	58
V 1790-07.	121	V 1877-07.	66
V 1811-07.	47	V 1879-07.	49
V 1821-07.	43	V 1880-04.	82
V 1823-07.	67	V 1880-08.	83
V 1825-07.	58	V 1880-12.	84
V 1830-07.	33	V 1882-02.	85
V 1835-07.	29	V 1891-07.	53
V 1840-06.	55	V 1894-07.	67
V 1841-07.	43	V 1895-04.	115
V 1842-06.	51	V 1895-08.	115
V 1843-06.	76	V 1895-12.	115
V 1844-07.	44	V 1896-07.	30
V 1845-07.	46	V 1897-07.	31
V 1846-07.	44	V 1899-07.	29
V 1847-06.	36	V 1901-04.	114
V 1848-06.	37	V 1902-04.	115
V 1849-06.	62	V 1903-04.	114
V 1850-01.	34	V 1910-07.	74
V 1850-02.	34	V 1914-01.	70
V 1850-03.	34	V 1916-01.	70
V 1852-01.	30	V 1922-07.	75
V 1853-01.	31	V 1923-07.	75
V 1859-08.	116	V 1925-07.	74
V 1860-02.	114	V 1926-07.	49
V 1860-03.	114	V 1927-07.	50

V 1928-07.....	50
V 1930-07.....	32
V 1932-01.....	59
V 1933-01.....	60
V 1935-07.....	59
V 1936-07.....	54
V 1937-07.....	54
V 1938-07.....	28
V 1939-07.....	53
V 1940-06.....	55
V 1942-06.....	51
V 1943-06.....	76
V 1947-06.....	36
V 1948-06.....	37
V 1949-06.....	62
V 1950-01.....	35
V 1950-02.....	35
V 1950-03.....	35
V 1951-08.....	114
V 1952-08.....	112
V 1953-07.....	120
V 1954-07.....	120
V 1960-02.....	108
V 1960-04.....	108
V 1962-02.....	107
V 1963-02.....	107
V 1971-07.....	120
V 1972-07.....	120
V 1972-08.....	120
V 1972-09.....	120
V 1974-09.....	120
V 1976-07.....	121
V 1982-08.....	88
V 1984-08.....	90
V 1986-08.....	89
V 1988-08.....	92
V 1992-08.....	91
V 1994-08.....	41
V 1995-08.....	71
V 1996-08.....	61
V 1997-08.....	77



Desiccators and Drying Cabinets

SICCO

A PRODUCT BRAND OF
BOHLENDER GmbH

Waltersberg 8
D 97947 Grünsfeld
Germany

+49 (0) 93 46-92 86-0
info@sicco.de
www.sicco.de