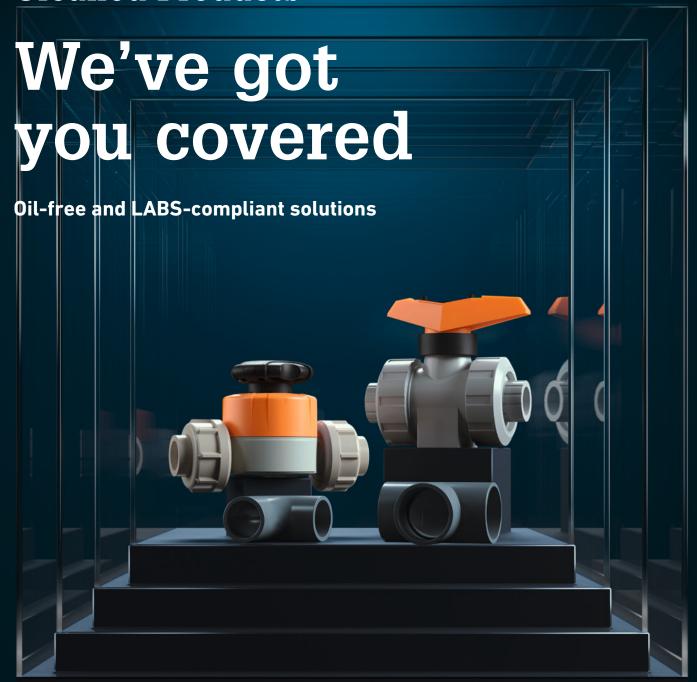


Cleaned Products



Certified LABS-compliancy with accredited in-house testing



Years of experience and concentrated knowledge of materials and lubricants made us a leader in cleaned products and cleaned systems. Valves, fittings, and pipes from GF Piping Systems are produced under the highest standards to deliver the best quality and customer satisfaction.

According to the latest guidelines, certifying LABS-compliancy with accredited in-house testing ensures that the necessary requirements are fulfilled, and our products can be used safely in demanding environments.

We developed defined cleaning and lubrication processes with extensive testing and gathered knowledge to assure best-in-class quality. Our experts support every customer with specialized knowledge, so each individual application is perfectly equipped for the tasks ahead.



*Over 30 years of experience

Concentrated knowledge of materials and lubricants to provide the right system for every application. With technical contact at eye level to guarantee safe and reliable operation of demanding applications.

*Accredited in-house testing

Proven reliability and our in-house experts to assure best-in-class quality and performance thanks to in-house testing capacities.

* Complete plastic system range

One-stop shopping for cleaned fittings and valves made from high-quality plastics ensures longevity and corrosion resistance.

* Individual customization

Individual requests can be fulfilled, and products can be cleaned on demand to fit the customers' requirements. This fully customizable solution protects from over-specification, too.

VDMA 24364 B2:

The new guideline for testing of coating compatibility

The German professional association VDMA released standardized guidelines in 2018 describing different requirements and testing procedures to classify products used in lacquer applications.

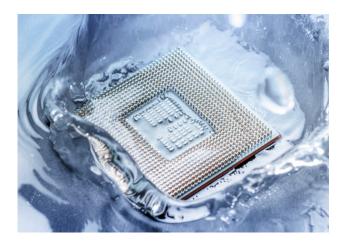
Cleaned Products by GF Piping Systems fulfill all the standards of the test category B2, proving to be safe for usage in applications with indirect lacquer contact such as pre-treatment of surfaces.



Free of paint wetting impairment substances (PWIS/LABS)

- † Interdependence of coating the system and the surface
- Free of oils, greases, silicone, graphite, metal soap, and much more
- ullet No disruption of the complete and uniform coating of a surface
- LABS-compliant products to prevent lacquer errors





LABS-compliancy vs. silicone-free

To achieve LABS-compliancy, products need to be siliconefree, but there are many more requirements than this. Products used in lacquering applications also need to be oil- and grease-free as well as free of PTFE-abrasion. Equating "LABScompliancy" with "silicone-free" is a common misconception resulting from years of uncertainty and unclear definitions.

Oil-free products

For water application in the microelectronic industry, contamination through installed products must be avoided. Exceptional surface finish and excellent leach-out characteristics are as important as choosing the suitable lubricants for valves. For oil-free products, only lubricants that do not significantly influence the water quality are used.

Lubrication is key

Lubrication is an essential part of all moving parts and especially of sealings. Without lubrication, these parts will get worn out quickly, sealings will get porous and thus contaminate the fluid. Therefore, selecting the correct lubrication for each application is critical. Due to our many years of experience, we can offer each customer a tailor-made solution. No lubrication is no option.

+GF+



Valve type	Silicone-free and cleaned	LABS-compliant B2
Ball Valve 546 Pro / 543 with PVDF ball seal	✓	✓
Ball Valve 546 Pro / 543 with PTFE ball seal	✓	×
Butterfly Valve 567 / 578	✓	✓
Check Valve 561 / 562	✓	✓
Diaphragm Valve 514 / 515 / 517 / Diastar with PTFE diaphragm	✓	×
Diaphragm Valve 514 / 515 / 517 / Diastar with EPDM / FKM diaphragm	✓	✓
Pressure Regulating Valve 582 / 586	✓	×
Ventilating- and Bleed Valve 591 / 595	✓	✓

^{*}Our standard valves are neither silicone-free nor LABS-compliant. These characteristics only apply for "silicone-free" and "LABS-compliant B2" valves.products.

Cleaned Products

Five steps to guarantee clean products and safe operation

We at GF Piping Systems can guarantee application fit and customized clean solutions to every customer no matter the complexity of the project and the application's requirements. With the following five steps, we can ensure the clean and safe operation of sensitive fields of application. Piping components like fittings and valves parts can also be cleaned on request, enabling every customer to avoid over-specification and meet the operation requirements.

Production

Fittings and valve components from GF Piping Systems are produced under clean conditions, and there are only non-silicone-based release agents used during manufacturing.



#1

Cleaning

To ensure the required cleanliness of the product, fitting and valve components are cleaned additionally in a unique cleaning process. This cleaning process takes place in a dedicated room where the parts are cleaned with deionized water.



#2



For specific product parts, lubrication is necessary for the functionality of our products – for instance, for dynamically stressed sealing materials in valves. Choosing the correct lubrication for your applications is critical to ensure failsafe operation.



#3

Packaging

The final, clean product gets packaged up to two times to protect it while being stored and shipped to the destination.



#4

Testing

We can guarantee and prove LABS-compliancy thanks to our in-house testing capability and our experts. The LABS-compliancy statement can be presented on request.



#5

Next steps

In this brochure, you have received the most important information and technical details. But nothing replaces a personal conversation with an expert from GF Piping Systems. It is all about your needs and how we can support you in your daily business challenges. If you have not already done so, make an appointment today.

Find your local contact on the back cover of this brochure or visit our GF Piping Systems website, where you will find specialized contact persons in your area. You will also find additional information on our products, including technical datasheets, operating instructions, and relevant certificates and approvals.

More information at

www.gfps.com/cleanedproducts

Worldwide at home

Our sales companies and representatives ensure local customer support in more than 100 countries.

www.gfps.com

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