

The New Generation of
KLEIBERIT Foam Gaskets



Customized Solutions





KLEIBERIT Foam Gaskets – the Customized Solutions

2 COMPONENT PUR FOAMS

KLEIBERIT foam gaskets are foamed directly on components with the help of FIPFG-Technology (Formed-in-Place-Foam-Gasket). The systems consist of a polyol component (A component) and a hardener (B component) which are mixed together at a given mixing ratio. A soft and resistant foam gasket is created after a few minutes.

WHY KLEIBERIT FOAM GASKETS?

- They are best suited for sealing many industrial building components.
- It is possible to use foam gaskets for practically all forms and geometry, including three dimensional.
- The foam gaskets are non-tacky in 2-25 minutes at room temperature.
- Large building component tolerances can be easily balanced with foam gaskets
- The sealing function is extremely stable against influences like moisture, dust and temperature

FIELDS OF APPLICATION

Automotive Industry

- Engine bay
- Interior
- Lighting
- Body

Renewable Energy

- Solar
- Photovoltaic

Packaging Industry

- Industrial packaging
- Packaging lid
- Pails, drums
- Container

Electronics

- Switch cabinet door
- Electrical housing
- Light systems
- Air conditioning

Filter Industry

- Hepa filter
- Industrial filter

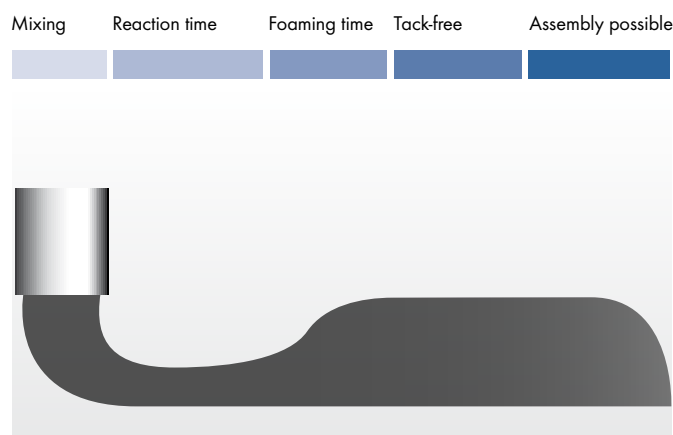
White Goods

- Kitchen machine
- Vacuum
- Filter
- Washing machine

The Foam Gasket Technology

THE REACTION PROCESS

The reaction is started through the mixture of components A and B. The result is a smooth chemical process under room temperature conditions. The applied compound foams to a uniform gasket in the process.



THE FOAMING PROCESS

Start time - is the time frame in which components A and B are mixed.

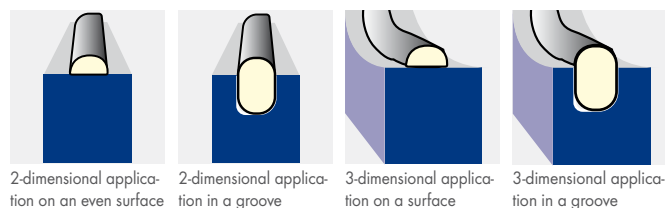
Reaction time - is the time frame in which the system starts to react (after approx. 20 - 60 seconds)

Foaming time - is the time frame in which the system expands to a gasket (after approx. 15 - 249 seconds)

Tack-free time - is the time in which the gasket surface is tack-free at room temperature and can be touched without damage (after approx. 2 - 25 minutes)

Assembly time - is the time frame in which the system can be stressed and when the sealed components can be assembled (after approx. 25 minutes - 12 hours)

APPLICATION METHODS



2-dimensional application on an even surface

2-dimensional application in a groove

3-dimensional application on a surface

3-dimensional application in a groove

ADVANTAGES

- Very low density
- Very soft: Shore 00: 35-45
- Very low compression set
- Very low water absorption

Product overview 2C PUR Adhesives

Product Comp. A	Color	Density in beaker g/L	Product Comp. B	Mixing Ratio	Hardness Shore 00/A	Consistency	Start time (s)	Tack Free time	Comp Set 70 °C 24 h, 50 %	Elongation at break	Tensile strength N/mm ²
523.1	black	190	523.2	100:28	70 / 15	thix	20	130 s	< 2% (80°C)	140 %	0.40
523.3	black	190	523.6	100:28	45 / -	thix	40	150 s	8 %	180%	0.18
523.8	grey	210	523.6	100:18	35 / -	fluid	70	8-10 min	8 %	200%	0.15
523.9	white	210	523.6	100:20	45 / -	fluid	60	7-9 min	8 %	180%	0.19

KLEIBERIT ADHESIVES - THE SPECIALIST AMONGST ADHESIVE MANUFACTURERS



KLEIBERIT adhesives are an now integral part of the world we live in. Today KLEIBERIT SE & Co. KG is based in Weingarten Baden (Southern Germany) and also has one of the most modern and innovative research and production centres worldwide. Innovative adhesive systems for a wide field of applications are being developed in cooperation with, and produced for international customers. The product range is designed specifically for customer requirements and worldwide availability is ensured with an intelligent logistics concept.

INNOVATIONS - NEW IDEAS DEVELOP TOGETHER WITH CUSTOMERS.

Adhesive bonding is the bonding technology of the future. KLEIBERIT'S strategy is to continue to provide new innovations for a wide field of applications. One investment for the future is the shown by the opening of the TECHNICAL CENTER in 2009. Customer can regularly be found here working closely with KLEIBERIT engineers and technical personnel to develop specific product solutions.

COMPETENCE PUR - RESEARCH AND DEVELOPMENT SECURE THE FUTURE.

The KLEIBERIT trademark stands for innovative research and development, the most modern production, highest product quality as well as service oriented, customer focused and competent consultation. And this for over 75 years.

In the last 25 years, KLEIBERIT has become a global trendsetter for PUR adhesive systems and has significantly influenced the market with its innovative product ideas.

CUSTOMER SATISFACTION - EVERY CUSTOMER IS NUMBER ONE WITH US.

On the road in many markets and all regions of the world, we speak almost every national language and are directly on site via a comprehensive service and consulting network. By working closely with machine and material manufacturers, we offer practical and innovative adhesive systems which meet a wide variety of international standards and norms.

SOCIAL RESPONSIBILITY - WE LIVE THE PRINCIPLE OF SUSTAINABILITY IN PROCESSES AND PROCEDURES ACCORDING TO CERTIFIED QUALITY AND ENVIRONMENTAL MANAGEMENT.

Responsibility towards the environment and the people in research, development, production and logistics is one of the main goals at KLEIBERIT. Our demand to combine high product quality with environmental and health and safety of the workforce accompanies our innovation process from the beginning. We also want to further develop this global responsibility in the future with sustainable processes and goals.

KLEIBERIT® ADHESIVES WORLDWIDE:

KLEIBERIT Chimie S.a.r.l.
Reichstett, France

KLEIBERIT Adhesives UK
Coalville, Leicestershire, England

KLEIBERIT Adhesives USA Inc.
Waxhaw, North Carolina, USA

KLEIBERIT Adhesives of Canada Inc.
Toronto, Ontario, Canada

KLEIBERIT Adhesives Asia Pte. Ltd.
Singapore, Singapore

KLEIBERIT Adhesives Australia
Sydney, Australia

KLEIBERIT Adhesives Japan
Osaka, Japan

KLEIBERIT Adhesives Beijing Co., Ltd.
Beijing, China

KLEIBERIT Russia
Moscow, Russia

KLEIBERIT Adhesives India Private Ltd.
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