



Technical Data Sheet



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Pattex Universal Sealant White, Grey and Black

CHARACTERISTICS

Pattex Universal Sealant is a low modulus, one-component, ready-to-use, pure neutral silicone sealant (alkoxy type) which contains a fungicide for sealing and bonding joints in sanitary and in facade joints when there is a risk of mould formation.

Pattex Universal Sealant combines the advantages of excellent primerless adhesion properties (including on synthetic surfaces), neutrality and good mildew resistance.

- 100% silicone
- Low modulus
- 25% movement capability
- Smooth and matt appearance
- Excellent UV-, weather and ageing resistance
- Waterproof
- Primerless adhesion on numerous substrates such as: ceramics, enamel, clear and layered glass (and all other glazed surfaces), metals, wood (painted or unpainted), PVC, PC, PMMA, concrete, etc.
- Excellent adhesion on plastics, including PMMA (best adhesion profile in the range)
- Non-corrosive
- Odourless during application
- Resistance to fungal growth
- Good resistance against conventional cleaning products and a lot of chemicals
- Suitable for mirror applications



APPLICATIONS

Pattex Universal Sealant can be used for:

- Sanitary joints: baths, wash basins, showers, kitchens
- Tiling and plumbing joints
- Controlled atmosphere rooms (refrigerated, clean rooms, etc.)
- Expansion joints for traditional construction applications and heavy and light prefabrication (façade panels, curtain walls), when there is a risk of developing mildew (facades which are north-facing, in the shade, exposed to damp, etc.)
- Bonding and sealing of mirrors (acc. DIN EN 1036-1)

STANDARDS

EN 15651-1 (CE marking)	product type F-EXT-INT: sealant for facade for interior and exterior applications
EN 15651-2 (CE marking)	product type G: sealant for glazing applications
EN 15651-3 (CE marking)	product type S: sealant for sanitary applications
EN 15651-4 (CE marking)	product type PW-EXT-INT: sealant for floor joints
EN 15301-1	reaction to fire: class E
ISO 846-B	microbiological growth: level 1
ISO 11600	class F-25LM and G-25LM

TECHNICAL DATA

Before curing	
Type of silicone	Alkoxy
Appearance	Paste
Density (ISO 2811-1)	~ 1,38 g/ml
Resistance to flow (ISO 7390)	~ 1 mm

Curing	
Skin formation time (+23 °C / 50% RH)	~ 40 min.
Curing speed (+23°C, 50% RH, cross-section of joint 20x10mm)	~ 2 mm / day
Application temperature	+ 5 to + 40°C

After curing	
Shore A hardness (ISO 868)	~ 22
Movement capability (ISO 11600)	25%
Max. joint width	30 mm
Change of volume (ISO 10563)	~ 6%
Temperature Resistance	- 50 to + 120°C

Mechanical properties	
Elastic recovery (ISO 7389-A)	~ 85%
Modulus at 100% elongation (ISO 8339-A)	~ 0,3 N/mm ²
Elongation at break (ISO 8339-A)	~ 500%



INSTRUCTIONS FOR USE

Pattex Universal Sealant is supplied ready-to-use and can be applied from the original packaging with no special pre-treatment.

Surface preparation

All surfaces must be clean and dry, free from any dust and grease or anything which is likely to impair adhesion of the sealant.

Degrease using a pad soaked in solvent (alcohol or white spirit) followed by wiping with a clean cloth.

Degreasing is performed using a pad soaked in solvent (alcohol or white spirit) followed by wiping with a clean cloth.

To get best sealing results it is recommended to mask edges of the joints with a tape before application of the sealant mass.

After joint and substrate preparation, if necessary, insert backing rod (closed cell, PE-foam backing rods) to required depth.

Joint dimensions

The movement capability of the sealant as well as local regulations must be considered. In general, the joint width must be > 10 mm and < 35 mm and the joint width should be twice the depth.

Recommended standard dimensions for exterior facade elements (acc. DIN 18540):

design joint width	15 mm	20 mm	25 mm	30 mm	35 mm
minimum joint width	10 mm	15 mm	20 mm	25 mm	30 mm
joint depth	8 mm	10 mm	12 mm	15 mm	15 mm

Recommended minimum joint width for joints around windows and exterior doors: 10 mm.

In case of rectangular sanitary joints, it is necessary to maintain a minimal depth of 5 mm. In case of triangular joints, both contact areas should be minimum 5 mm wide.

Priming

Pattex Universal Sealant does not require a primer on most common substrates. In the case of immersion and especially on porous substrates the application of a specific primer is recommended.

Sealant application

Apply sealant ensuring that the seal is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces.

Directly after application, spray the joint with a mild detergent solution (soapy water) and smooth off with an appropriate tool.

Remove any tape immediately before surface skin is formed.

Smooth over any proud sealant edges immediately.



Cleaning tools

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent.
Any cured sealant can be removed by scraping (e. g. using a razor blade) or by using a special silicone remover product.

Please note

The joint must be cleaned and maintained regularly.
Do not use oxidizing detergents like hydrogen-peroxide for cleaning of the joint, because that could cause discolouration of the sealant.
Take care of a good and regular air circulation in the room where the sealant is applied.
Curing speed is depending on temperature, air humidity and on the dimensions of the joint. Low temperatures, low air humidity or big joint dimensions need longer curing speeds.

LIMITATIONS

For any applications on sensitive surfaces carry out preliminary testing to check compatibility with the sealant.

Pattex Universal Sealant is not recommended for joints that are in direct food contact.

Pattex Universal Sealant is not recommended for structural glazing applications.

Pattex Universal Sealant is not recommended for swimming pool joints, for aquarium joints or for applications under water.

Pattex Universal Sealant seals must not be over-painted (poor covering and adhesion of the paint).

Before using **Pattex Universal Sealant** on painted substrates, paint has to be completely dry and cured. Prior compatibility tests are recommended, considering the variety of paints that exist.

Pattex Universal Sealant is not recommended on materials which can exude certain components over time (butyl sealant, EPDM rubbers, polychloroprene, etc.). Discolouration or reduction of adhesion properties could take place.

Application of **Pattex Universal Sealant** on natural stone (e.g. marble, granite) is not recommended. For applications on natural stone use a special natural stone silicone.

Pattex Universal Sealant is not recommended for applications on PTFE (Teflon®), polyethylene and polypropylene.

GENERAL INFORMATION

**Storage**

Store **Pattex Universal Sealant** in a dry place between 5 °C and 25 °C.

Shelf life is 12 months in the original packaging after date of manufacture (the expiry date is shown on the packaging).

Packaging

280ml PE cartridges

Colours

White

Grey

Black

HEALTH AND SAFETY

Before using the product please see related Material Safety Data Sheet that is available on request.

“The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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