

Instructions for Use & General Information on the Product Group

DELO®-PUR

Two-component polyurethanes



Application areas

DELO-PUR adhesives are two-component polyurethanes. They are predominantly used for bonding, sealing and coating in electronics, electrical engineering, mechanical engineering, automotive and tool construction.

Many DELO-PUR products are filled in DELO-AUTOMIX double chamber cartridges and can be easily mixed and dispensed by means of a dispensing gun and static mixing tubes. These products are suitable for the use in the entire industry. DELO supplies suitable mixing tubes we also use in internal development and testing. You can find further information in the DELO-AUTOMIX selection chart and instructions for use.

Preparation of the components to be bonded

The contact surfaces must be free of oil, grease and other contaminations in order to achieve optimal bond strength. We provide our DELOTHEN cleaners. You can find more details in the “Cleaners” technical information. After cleaning, adhesion to the component can be further improved by surface pretreatment. You can find further information in the written information on surface pretreatment. The suitability and strength of the adhesive are to be verified on original components under application-specific conditions.

Processing

2-component products consist of the components A and B producing the ready-made adhesive only after proper, homogeneous mixing in the correct ratio. Therefore, the 2-component products are offered as a set of both components with matched fill quantity and one single batch number. The data sheet and specification values are exclusively determined with components of the same batch and are only valid in this combination.

Open containers/hobbocks:

Component A:

1. Remove the cover
2. Remove the Styrofoam plate
3. Remove the protective sheet
4. Insert the follower plate

Component B:

Please make sure that no air humidity can penetrate the open container!

1. Remove the cover
2. Remove the drying agent
3. Remove the Styrofoam plate
4. Cut a cross of approx. 10 cm into the aluminium product foil
5. Insert the conveyance tube through the crosswise cut
6. Insert the follower plate

Opened containers with DELO-PUR must be used up within a maximum of 4 weeks (surroundings: +23 °C, max. 50 % rel. humidity). It must be ensured that the stored adhesive is hermetically closed (e.g. by the barrel follower plate on the supplied container) to prevent entering of air and humidity. Reclosing and later reuse is not intended.

Products containing a filler that might sediment, must be homogenized through appropriate measures before use (e.g. tumbling in the supplied container) and kept homogeneous within the above processing time (e.g. storage tank with stirring element). Details can be found in the Technical Data Sheets.

During maintenance work, product exchange, etc. on dispensing systems, we recommend exchanging the product-guiding lines instead of cleaning or rinsing them.

Please check the product-guiding parts, such as dispensing valves and product tubes, for compatibility with the adhesive or the components. Suitable materials predominantly include stainless steel and common plastics, such as PE, PP, PUR or PTFE. When choosing the material, the compatibility with polyols and isocyanates must be verified. We do not recommend using non-ferrous metals, copper and its alloys (e.g. Zn, Ni, Cu, Fe).

Please also note our instructions about suitable cleaners.

DELO-AUTOMIX:

The adhesives are applied by means of manual or pneumatic dispensing guns.

Direct pressurization of the cartridge is not recommended. Air may penetrate the adhesive past the piston. This can result in imprecise dispensing results and even air bubbles in the dispensed adhesive.

1. Insert double chamber cartridge in dispensing gun
 - Push the securing lever of the dispensing gun upwards
 - Insert the cograil from ahead to the end stop (cogging down)
 - Open the dispensing gun by flipping the cartridge retainer upwards
 - Insert double chamber cartridge
 - Close the cartridge retainer for cartridge arrangement
2. Equalize fill level deviations
 - Remove the closing cap from the cartridge top by turning
 - Equalize fill level deviations by operating the trigger lever (disposal according to MSDS)
 - The double chamber cartridges are overfilled beyond the adhesive amount specified so that no loss occurs while equalizing the fill level deviations
3. Attach mixing tube
 - Attach the mixing tube and lock it by a quarter turn, or lock swivel nut by a quarter turn
4. Avoid mixing errors
 - Before use, abandon one content of the mixing tube in order to prevent mixing errors and ensure perfect adhesive curing (disposal according to material safety data sheet)
5. Adhesive application
 - Apply the homogeneously mixed adhesive to the component



After work finish or during breaks, the mixing tube can remain on the cartridge as closure instead of the original closure cap.

If the processing pauses are shorter than the processing time of the 3 g preparation of the specific product, the same mixing tube can be used again.

Before processing continues, the previous mixing tube is removed, the outlet at the cartridge is ridged of possibly cured adhesive, and a new mixing tube is attached.

It is the user's responsibility to test the suitability of the dispensing equipment with the original product under close-to-production conditions.

Curing

Two-component adhesives cure at room temperature after mixing the two components. After exceeding the processing time, the viscosity increases until complete curing is achieved.

Higher temperatures reduce the curing time. Temperatures below room temperature decelerate curing. In extreme cases, the product cures incompletely or not at all. Curing conditions deviating from room temperature can influence the product properties.

You can find the detailed, product-specific information on the processing of each product in the specific Technical Data Sheet.

Instructions and advice for occupational health and safety

See Material Safety Data Sheet

Storage

In unopened original container

Storage life: see Technical Data Sheet

CONTACT

DELO Industrial Adhesives

- ▶ **Germany** · Windach/Munich (Headquarters) · Phone +49 8193 9900-0 · info@DELO.de · www.DELO.de
- ▶ **China** · Shanghai · Phone +86 21 2898 6569 · china@DELO-adhesives.com · www.DELO-adhesives.com/cn
- ▶ **Malaysia** · Kuala Lumpur · Phone +65 6807 0800 · malaysia@DELO-adhesives.com · www.DELO-adhesives.com/en
- ▶ **Singapore** · Phone +65 6807 0800 · singapore@DELO-adhesives.com · www.DELO-adhesives.com/en
- ▶ **South Korea** · Seoul · Phone +82 31 450 3038 · korea@DELO-adhesives.com · www.DELO-adhesives.com/en
- ▶ **Taiwan** · Taipei · Phone +886 2 6639 8248 · taiwan@DELO-adhesives.com · www.DELO-adhesives.com/cn
- ▶ **USA** · Sudbury, MA · Phone +1 978 254 5275 · usa@DELO-adhesives.com · www.DELO-adhesives.com/us

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