Application areas

DELO® MONOPOX products are based on acrylates and are predominantly used in electronics, microelectronics, electrical engineering and precision engineering for bonding, coating, fixing and sealing.

DELO® MONOPOX adhesives are one-component, heat-curing products.

Preparation of the components to be bonded

The contact surfaces must be free of humidity, grease and other contaminations in order to achieve optimal bond strength. For cleaning we recommend our DELOTHEN cleaners. You can draw more detailed information from the Technical Information “DELOTHEN Cleaners”.

After cleaning, adhesion to the component can be further improved by means of surface pretreatment. You can draw additional details from the Technical Information “Surface Pretreatment”.

The suitability and strength of the adhesive are to be verified on original components under application-specific conditions.
**Preparation of the adhesive**

The products are supplied ready for use. Depending on the scope of delivery, they can be processed manually directly from the container or by means of devices such as DELOMAT dispensing units. The adhesive must be conditioned to room temperature without heat addition for the appropriate amount of time before bonding in the supplied original container (see Technical Data Sheet). Condensation water on the adhesive and the substrate must be prevented. Freezing and thawing the adhesive again is not permitted!

**Processing**

You can draw the detailed, product-specific information on the processing of each product from the respective Technical Data Sheet. The products can be processed by means of DELO® dispensing units.

Preparation/pretreatment → Application → Joining → Curing

Production flow for bonding components:
1. Preparation/pretreatment of the components
2. Application of the adhesive to one component
3. Joining
4. Curing by heat addition

Preparation/pretreatment → Application → Curing

Production flow for coatings:
1. Preparation/pretreatment of the components to be casted
2. Application of the adhesive
3. Curing by heat addition

**Curing**

The curing temperatures and times are product-specific and can be found in the appropriate Technical Data Sheet. The heating time of the components must be added to the curing time.

Heat curing can be achieved in air convection ovens, with IR transmitters, or with other suitable heat sources, such as thermodes or induction systems. It is important that the adhesive, and not the joining parts, reach the specified curing temperature. Otherwise the adhesive will not be fully cured.

If the temperatures used for curing are below the temperature ranges specified in the Technical Data Sheet, curing is decelerated, or the product will not completely cure. The adhesive must not be heated beyond the maximum curing temperature specified in the Technical Data Sheet.

When bonding large areas, tensions during the heating, curing and cooling phases (for example by tempering) must be avoided.

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

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**Cleaning**

Isopropanol and acetone are generally suitable cleaners for DELO® MONOPOX adhesives based on acrylates.

The type of cleaner to be used depends on the specifications of the dispensing device manufacturer. The manufacturer's instructions must be followed in any case.

Details about cleaning of valves and systems can be found in the cleaning instructions for DELO® MONOPOX products.

**Instructions and advice for occupational health and safety**

See Material Safety Data Sheet.

**Storage**

After delivery, remove the package from the transport packaging and condition to the storage temperature in unopened condition for at least 4 h.

Handling of cooled package +32 °F – +50 °F (0 °C – +10 °C)
Handling of dry ice package – 0.4 °F (– 18 °C) storage

Please make sure that frozen container is only minimally touched as large temperature difference between container and adhesive may lead to the adhesive becoming “detached” from the inner cartridge wall. It is recommended that the container is removed at its rear end or thermally insulating gloves are used.

Storage life and storage temperature can be drawn from the Technical Data Sheet.

The product may be stored in the unopened original container only.

The storage temperature specified in the Technical Data Sheet must not be undershot.
Label

Typical design of a GHS label at DELO®. Depending on the container size, the design and content of the label may vary.

1. Product name
2. Container content (volume/weight)
3. Datamatrix
   Extended article number@Batch@Expiry date@Product name
   (1734518-Z03-EN@12345678@2015-06-30@DELO DUALBOND AD345)
4. GHS labeling
5. Article number
6. Batch number
7. Expiry date
8. Storage temperature

The data and information provided are based on tests performed under laboratory conditions. Reliable information about the behavior of the product under practical conditions and its suitability for a specific purpose cannot be concluded from this. It is the customer’s responsibility to test the suitability of a product for the intended purpose by considering all specific requirements and by applying standards the customer deems suitable (e.g. DIN 2304-1). Type, physical and chemical properties of the materials to be processed with the product, as well as all actual influences occurring during transport, storage, processing and use, may cause deviations in the behavior of the product compared to its behavior under laboratory conditions. All data provided are typical average values or uniquely determined parameters measured under laboratory conditions. The data and information provided are therefore no guarantee for specific product properties or the suitability of the product for a specific purpose. Nothing contained herein shall be construed to indicate the non-existence of any relevant patents or to constitute a permission, encouragement or recommendation to practice any development covered by any patents, without permission of the owner of this patent. All products provided by DELO® are subject to DELO®’s General Terms of Business. Verbal ancillary agreements are deemed not to exist.

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