

DELO-AUTOMIX Simple processing of two-component adhesives		Epoxy resins DELO-DUOPOX								Polyurethanes DELO-PUR					
		fast curing	✓	✓	✓						✓	✓	✓		
multi-purpose		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
elastic / tension-equalizing		✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	
very high strengths					✓	✓	✓	✓	✓	✓					
high temperature of use					✓	✓	✓	✓	✓	✓	✓				
for large gaps				✓		✓		✓	✓		✓	✓	✓	✓	
good flow behavior		✓	✓		✓	✓		✓			✓				
Product code number		02 rapid	03 rapid	03 rapid thix	AD821	AD840	AD848	AD894	AD895	AD897	9691	9692	9694	9895	
Color cured product		yellowish transparent	yellowish transparent	yellowish transparent	yellowish transparent	dark gray	dark gray	black	gray	gray	black	black	black	light beige	
Mixing ratio		A:B by weight	1:1	1:1	1:1	0.58:1	0.88:1	0.87:1	7:3	7:3	7:3	1:1	1:1	1:1	1:1
		A:B by volume	1:1	1:1	1:1	1:2	1:1	1:1	2:1	2:1	2:1	1:1	1:1	1:1	1:1
Viscosity [mPas] (+23 °C) mixture		12,000	15,000	38,000	21,000	72,800	250,000	16,000	90,000	pasty	80,000	pasty	pasty	pasty	
Processing time [min] at room temperature		3 g preparation	6	3	3	18	–	–	47	37	34	10	8	20	30
		100 g preparation	–	–	–	20	90	90	45	30	30	4	5	7	30
Curing conditions		firmness to touch 1 – 2 MPa (at rt/at +80 °C)	12 min / –	11 min / –	13 min / –	5.5 h / 12 min	7 h / 13 min	7 h / 10 min	5 h / –	5.5 h / –	6 h / –	90 min / –	30 min / –	2 h / –	7 h / –
		functional strength (at rt/at +80 °C)	24 h / 15 min	2 h / 5 min	2 h / 5 min	24 h / 30 min	16 h / 20 min	16 h / 15 min	7 h / 16 min	8 h / 18 min	8 h / 17 min	6 h / 20 min	2 h / 5 min	8 h / 30 min	72 h / 60 min
		final strength (at rt/at +80 °C)	72 h / 1 h	24 h / 40 min	24 h / 1 h	7 d / 70 min	72 h / 40 min	72 h / –	24 h / 30 min	24 h / 30 min	24 h / 25 min	72 h / 22 min	72 h / 10 min	72 h / 32 min	72 h / 90 min
Tensile shear strength [MPa] Al/Al sand-blasted		DIN EN 1465; 1.6 mm	18	13	13	14	23	23	19	19	17	12	16	13	13
		DELO Standard 39; 6 mm	16	16	17	13	27	23	31	32	32	13	23	14	12
Storage life after delivery in unopened original containers at room temperature		12 months	12 months	12 months	6 months	12 months	6 months	6 months	12 months	12 months	6 months	6 months	6 months	6 months	
Container sizes of double chamber cartridges [ml] packing units		5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	5 x 50	
		5 x 200	5 x 200	–	–	5 x 200	5 x 200	5 x 200	5 x 200	5 x 200	5 x 200	–	–	5 x 200	5 x 200
Materials		glass, plastic, metal, ceramic	plastic, metal, ceramic	plastic, metal, ceramic	plastic, metal, ceramic	plastic, metal, ceramic, wood	plastic, metal, ceramic, wood	plastic, metal, ceramic	plastic, metal, ceramic, wood	plastic, metal, ceramic	plastic, metal, ceramic	plastic, metal, ceramic	glass, plastic, metal, ceramic, wood	glass, plastic, metal, ceramic	
Application examples		casting of small hollows	bonding of small components	bonding and sealing of housings	casting of small components bonding of larger components	bonding and coating test for cytotoxicity acc. to ISO 10993-5	bonding of various metals and plastics	casting and bonding of components	bonding and coating test for cytotoxicity acc. to ISO 10993-5	coating and trowelling	casting of sensors and small components test for cytotoxicity acc. to ISO 10993-5	bonding of housings	sealing of housings authorization for ship industry	bonding and sealing of plastic test for cytotoxicity acc. to ISO 10993-5	
Basic properties and advantages of all products		highly reliable connections, mainly with dissimilar material combinations, multi-purpose, solvent-free, low curing shrinkage, very good temperature and chemical resistance, curing without increased temperatures (however, the curing time can be accelerated by heat)													

AD = ADhesive

Product description

DELO-DUOPOX are two-component epoxy resins and DELO-PUR are two-component polyurethanes curing at room temperature (rt) after mixing the two components in the ratio indicated.

The DELO-AUTOMIX products can be processed from double chamber cartridges with a static mixing tube similar to one-component products.

Standard temperature range

DELO-AUTOMIX products are normally used at temperatures of up to +80 °C resp. +140 °C. The suitability of the respective adhesive for the intended temperature range of use must be tested according to the application before use. You can find details on the behavior of the products under the influence of elevated temperatures in the respective technical data sheet.

Processing

- Two-component products must be mixed homogeneously at the ratio indicated. This task is taken by the practical mixing and dispensing system DELO-AUTOMIX.
- Resin and hardener are filled in double chamber cartridges in the correct volume mixing ratio.
- With the dispensing guns DELO-XPRESS for manual or pneumatic operation, the two components are pressed out of the cartridge without great effort. The mixing tube attached to the cartridge serves for homogeneous mixing and exact dispensing. When following the instructions for use, mixing errors are excluded. No further utensils are necessary and neat application is enabled.
- Please pay attention to the respective instructions for use, as well.

Curing

- Curing proceeds at room temperature; increased temperatures accelerate curing
- When mixing the components, the period of time available for processing the product starts
- Details: see technical data sheets

Surface pretreatment

The surfaces to be bonded must be free of oil, grease, separating agents and other contaminations. We recommend our DELOTHEN cleaners. After cleaning, adhesion can be further improved by surface pretreatment.

Further information

You can find more details on type-specific properties in the technical data sheets and material safety data sheets. Our Engineering Department will be pleased to support you in technical application tests and questions resulting from processing DELO products.



Epoxy resins
two-component · cold-curing · high-strength to elastic

Polyurethanes
two-component · cold-curing · tough-elastic

SELECTION CHART DELO-AUTOMIX system

DELO-DUOPOX

DELO-PUR

DELO-PHOTOBOND	1-component acrylates UV-curing · light-curing
DELO-DUALBOND	1-component acrylates light-/humidity-curing · UV-/light-/heat-curing
DELO-KATIOBOND	1-component epoxies UV-curing · UV-/light-curing · light-activated
DELO-DUALBOND	1-component epoxies UV-/light-/heat-curing
DELOMONOPOX	1-component epoxies heat-curing
DELO-DUOPOX	2-component epoxies cold-curing
DELO-ML	1-component methacrylates anaerobic-curing
DELO-CA	1-component cyanoacrylates fast-curing
DELO-GUM	1-component silicones highly flexible
DELO-PUR	2-component polyurethanes cold-curing · tough-elastic
DELOTHEN	Cleaners CFC-free
DELOMAT	Dispensing units precise
DELOLUX	Curing lamps intensive

Mixing tubes and accessories

- Mixing tube B 050 short for 50 ml double chamber cartridges with clip-on nozzle for especially precise dispensing
- Mixing tube B 050 universal for 50 ml double chamber cartridges luer-cone, attaching of dispensing tips is possible
- Mixing tube F 200 short for 200 ml double chamber cartridges
- Mixing tube F 200 long for 200 ml double chamber cartridges dispensing tips can be attached to this mixing tube
- Euro cartridge adapter for the dispensing with Euro cartridge dispensing guns

DELO dispensing guns for 50 ml double chamber cartridges

- DELO-XPRESS 902 manual operation; for 1:1 and 2:1 cartridges
- DELO-XPRESS 903 pneumatic operation; for 1:1 cartridges
- DELO-XPRESS 907 pneumatic operation; for 1:1 and 2:1 cartridges

DELO dispensing gun for 200 ml double chamber cartridges

- DELO-XPRESS 905 pneumatic operation; for 1:1 and 2:1 cartridges



Simple mixing and dispensing by means of DELO-XPRESS 902



DELO-XPRESS 903 DELO-XPRESS 907 DELO-XPRESS 905

Our selection charts are a technical selection aid giving an overview of various product variants. We will be pleased to provide you with sales details, such as available container sizes, stock availability and minimum order quantities, on request.

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 user's responsibility to test the suitability of the product for the intended purpose by considering all specific requirements. 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. Verbal ancillary agreements are deemed not to exist.

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DELO

DELO Industrial Adhesives
DELO-Allee 1
86949 Windach / Munich
Germany
Phone +49 8193 9900-0
info@DELO.de
www.DELO.de