

■ diaflex diaflex AP #2518

Product description

diaflex AP is a permanently flexible 2-component PUR elastomer system for the production of special, small series or single seals. Due to a very high abrasion, tensile and tear resistance, as well as a very good resistance to oils, lubricating greases and cooling lubricant emulsions, diaflex AP is ideally suited for applications in mechanical and plant engineering. The low processing viscosity also allows the production of complicated and thin-walled parts.



Typical applications

- permanently elastic seals, sealing profiles
- Scrapers, oil scrapers
- Tool holder
- Prototyping
- Forms and models
- Concrete moulding

Characteristics

- Low processing viscosity, very good flow characteristics
- High elongation, high resetting force
- Very high abrasion, tensile and tear resistance
- Very good tensile strength
- Very high resistance to oils, greases and cooling lubricant emulsions
- High permanent elasticity
- Cold curing, manual and machine-processable

Chemical resistance

For questions about chemical resistance please contact our technicians.

Product data condition of delivery

Hue Comp. A - resin	black
Comp. B - hardener	slightly yellowish
Density Comp. A - resin	1,02 g/cm ³
Comp. B - hardener	1,10 g/cm ³

Viscosity Comp. A - resin	700 mPas
Comp. B - hardener	12000 mPas
Mixing ratio	(A:B) 556:444 bzw. 100:80
Pot life	20 minutes
Curing	24 hours deformation-time at room temperature
Processing temperature	20°C to 25°C room temperature

Product data outreacted product

Density	1.06 g/cm ³	DIN 53479
Strength	65	
Tensile strength	8 N/mm ²	DIN 53455
Abrasion resistance	14 mg	(at 100 r/min)
linear dimensional changes	less than 0,2 %	500 x 50 x 25
Tension strain	690 %	DIN 53455
Tear resistance (with incision)	35 N/mm	ASTM D 624 B
Temperature resistance (permanent)	-20 to +80 °C	

Storage / Shelf Life

Store in original, unopened container in a dry place at room temperature (20°C-+25°C). Shelf life 12 months. Protect from direct sunlight. Higher temperatures reduce shelf life. Note: diaflex can crystallize at temperatures below +15 °C. This process is reversible. After slight heating (30 - 60 °C) and subsequent cooling of the unmixed components, the material is ready for use again.

Preparation

For impressions with diaflex, the mould must first be coated with Diamant release agent (Art.No.: #1354 or #1355). This prevents the material from adhering to the surface and allows the material to be easily removed.

Mixing procedure

Add the hardening component B (yellowish) completely to the resin component A (black). Mix intensively manually with a spatula or by means of a drill and propeller stirrer (approx. 2 min. at max. 250 rpm). Material adhering to walls and floor should also be mixed well.

Application description

After the mixing process, the material must be processed immediately. Otherwise, premature gelation will occur. diaflex AP can be poured into a mould that is open at the top. Alternatively, diaflex AP can be injected into a cavity after decanting into an empty cartridge or syringe. To avoid air pockets, the cavity must be filled slowly from bottom to top.

Disposal

Unused residual material from the cans can be disposed of normally when mixed in the correct ratio and fully cured (EAKV 170203). Unmixed material must be disposed of as chemical waste (EAKV 080111). When booking the Diamant Service Team, waste will be disposed of by us. Further information can be found in the service data sheet.

Safety Data Sheet

Please read the appropriate safety data sheet before processing the product. Material Safety Data Sheets are available on a daily basis upon request via info@diamant-polymer.de or by phone +49-2166-98360. DIAMANT guarantees the product properties as long as they are stored and used according to the specifications listed here. DIAMANT does not assume any responsibility for the processing of the material. Our technicians will be happy to answer any further questions you may have.

Accessories / processing equipment

#1354 Release agent, liquid #1355 Release agent, spray 500 ml #1417 Cleaner, liquid #1534 Cleaner, spray 500 ml #78 Spatula, DIAMANT green #78-1 Japanese spatula 10 x 10 cm #0789 Mixing propeller

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