

January 2023

APM Epicol 110

Description	
System:	2-component epoxy adhesive
Adhesive type:	heat-soluble temporary adhesive
Colour:	yellow
Viscosity:	liquid/thixotropic
Solid bodies:	100% / solvent-free
Curing:	room temperature
Temp. range:	-20 °C to +60 °C

Application / specifications	
APM number:	102569 Epicol 110
Application:	glass processing
Adhesion:	glass / metal / ceramics
Directive 2011/65/EC:	fulfils RoHS Directive
EC - no. 1907/2006:	fulfils REACH requirement

Epicol 110 is a 2-component epoxy adhesive. Epicol 110 is used as a temporary adhesive or protective coating. Epicol 110 is used for:

- Polishing lenses and prisms
- Processing glass and ceramics
- As a protective coating in glass processing
- Cutting and dividing in the semiconductor industry

The adhesive cures within 2 hours at room temperature. The adhesive has stronger adhesion than black adhesive or sealing wax ordinarily used for temporary adhesion. Parts bonded with Epicol 110 can be detached again by being submerged in simmering water or by heating up to 130 °C.

Properties of fluid adhesive	
Colour mixture:	yellow
Colour of component A:	white
Colour of component B:	yellow
Characterisation:	2-component epoxy
Viscosity (25°C):	24 - 30 Pa.s
Mixture ratio	1:1 (volume)
Pot life:	7 min
Density (25°C):	1.3 g/cm ³

Surface pretreatment / cleaning

The surfaces to be bonded must be dry and free from dust, oil, separating agents and other impurities. It is best to clean glass surfaces using the aqueous ultrasound cleaning method at

raised temperature. Clean metallic surfaces with aqueous cleaners or clean solvents.

Applying the adhesive

Mix Epicol 110 homogeneously with a static mixer. Processing time of maximum 7 minutes at room temperature.
Curing time at room temperature 2 hours.

Components may crystallize during storage. Please melt that crystallization at a **maximum temperature of + 40°C**. Let cool down to room temperature prior to use.

Separating bonded parts

Epicol 110 is removed by placing the component in hot water at a minimum temperature of 80°C. Separation takes place within seconds at 90°C. Epicol 110 then dissolves without residue and can be removed as foil. Separation can also take place in a temperature chamber from 130 °C.

Safety instructions

Avoid contact with skin and eyes. When applying the adhesive, always wear gloves and safety goggles. If adhesive comes into contact with the skin, do not use solvents to remove. Instead wash the affected area (hands) with warm water and soap and then dry. Liquid adhesive irritates on contact with the eyes and may lead to permanent eye damage. Before use, please observe the instructions in the safety data sheet.

Storage

The adhesive has the best shelf life at temperatures between 5°C and 20°C. The

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adhesive shelf life in its unopened original packaging is at least 6 months under these conditions.

Compliance

Epicol 110 and all its constituents comply with the requirements of RoHS and REACH guidelines. Always comply with the safety data sheet when handling the adhesive.

Procurement

Epicol 110 is delivered in double cartridges of 50 g.

Disposal

The liquid components of the adhesive must be disposed of as hazardous waste in the same way as synthetic resin or paint components. Cured adhesive is disposed of as hazardous waste in the same way as thermosetting plastics depending on local legal requirements or as domestic waste.