BECKOPOX™ EP 075

Technical Datasheet

TYPE

Reactive diluent

SPECIAL PROPERTIES AND USE

Flexibilizing bifunctional reactive diluent of neutral odour for unmodified epoxy resins

FORM OF DELIVERY (f.o.d.)

100 %

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219		
dynamic viscosity (500 1/s; 23 °C)	[mPa.s]	40 - 70
Epoxy Equivalent DIN EN ISO 7142		
epoxy equivalent (form of delivery)	[g/mol]	320 - 360
Iodine Colour Number DIN 6162		
iodine colour number		<= 2

Not continually determined:

Dynamic Viscosity DIN EN ISO 3219		
dynamic viscosity (500 1/s; 25 °C)	[mPa.s]	35 - 60
Density (Liquids) DIN EN ISO 2811-2		
density approx. (20 °C)	[g/cm³]	1,06
Flash Point (Pensky-Martens) DIN EN ISO 2719		
flash point	[°C]	> 100

DILUTABILITY

special white spirit 100/140	○	methoxypropyl acetate	●
xylene	●	methoxypropanol	●
acetone	●	ethanol	●
methyl ethyl ketone	●	butanol	●
methyl isobutyl ketone	●	isopropanol	●

● = unlimited dilutability
⊙ = limited dilutability
◘ = substantial dilutability
○ = very limited or no dilutability

COMPATIBILITY

% Beckopox EP 075	90	75	50	25	10
% other binder	10	25	50	75	90
Epoxy resins					
Beckopox EP 116, EP 117	●	●	●	●	●
Beckopox EP 147w	●	●	●	●	●
Beckopox EP 128, EP 140	●	●	●	●	●
Epoxy type 1	●	●	●	●	●
Other binders					
dibutyl phthalate	●	●	●	●	●
Resamin HF 480	●	●	●	●	●
Novares LA 700	●	●	●	●	●

● = definite compatibility
○ = very limited or no compatibility

SUGGESTED USES AND PROCESSING

Beckopox EP 075 is a polypropylene glycol diglycidyl ether and acts as a reactive diluent for liquid epoxy resins, e. g. Beckopox EP 140. Unlike conventional solvents such as xylene or toluene, this diluting agent is incorporated into the macromolecule during the curing process and is therefore unable to migrate. It enables the viscosity to be adjusted while at the same time improving the elasticity of highly viscous, brittle epoxy resins.

Beckopox EP 075 is used in combination with e. g. Beckopox EP 140 for solvent-free two-component systems like coatings, adhesives, casting- and laminating compounds. These formulations are even suitable for curing at elevated temperatures.

Beckopox EP 075 is miscible with the majority of organic solvents and can be processed together with the solvents commonly used in the paint industry such as toluene, xylene, butanol, butyl diglycol or methyl isobutyl ketone.

Viscosities of mixtures of Beckopox EP 140 with Beckopox EP 075 (parts by weight)

EP 140	EP 075	viscosity
100.0	0	9900
97.5	2.5	7750
95.0	5.0	6050
92.5	7.5	4800
90.0	10.0	3800
87.5	12.5	3000
85.0	15.0	2500

viscosity in mPa.s, DIN EN ISO 3219, 25 °C

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 365 days.

DISTINGUISHING FEATURES

Compared with Beckopox EP 080 Beckopox EP 075 shows flexibilizing properties and nearly no odour. The dilution-effect of Beckopox EP 075 is somewhat poorer in comparison with Beckopox EP 080.

SAFETY AT WORK AND ENVIRONMENTAL PROTECTION

When handling and processing epoxy resins and hardeners, the rules and regulations established by local authorities should be observed. A Material Safety Data Sheet is available on request.

Producer:

Novares LA 700 (RÜTGERS Novares GmbH)