

VILEPOX[®] EG-55/8M

Fire-retardant casting resin system

Field of application:

As a two-component, fire-retardant, casting and potting system hardening at room temperature without solvents for casting and potting of parts of different size.

Characteristics:

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- fire retardant V-0
 - UL-certified system
- "B" thermal class (130 °C)
- free of halogens
- excellent mechanical properties
- excellent chemical properties
- excellent dielectric properties
- good thermal conductivity
- good thermal resistance
- good resistance to low temperatures
- convenient application features for both manual and power-driven application
- free of halogens and solvents
- satisfies the requirements of RoHS
- available both in natural and coloured version

	VILEPOX [®] EG-55/8M "A"	VILEPOX [®] EG-55/8M "B"
Characteristics:	Modified epoxy resin containing inorganic fillers, free of solvents	Modified poliamines, free of solvents.
Appearance:	light grey liquid *	yellow, clean, transparent liquid
Density at 25 °C, g/cm3	1,71-1,73	0,96-0,98
Viscosity at 25°C, mPas	10 000-16 000	15-40
Flashpoint, °C	>100	
Non-volatile matter content %	99	
Colour by Gardner		max. 3
Shelf-life	min. 9 months**	min. 12 months
Storage	in tightly closed, original containers at 5-25°C, in a dry place far from heaters	
Flammability	III. grade	III. grade

Specification of the components

* on special request other colours are also available

**As sedimentation of fillers may occur, the material has to be mixed thoroughly before use.

Specification of the mixture



Mixing ratio:

VILEPOX[®] EG-55/8M component,,A" VILEPOX[®] EG-55/8M component ,,B"

100,0 parts of mass (kg) 14,0 parts of mass (kg)

	Properties of the mixture
Initial viscosity at 25 °C, mPas	1000-1800
Density, g/cm ³ (at 20 °C)	1,57-1,64
Pot life until reaching doubble viscosity (at 25°C., 50 g), minute	50-65
Gel time with gelnorm, 18 ml, 25°C, 100g, min	360-440
Hardening time at room temperature, hours	appr. 24
Time of complete hardening at room temp, days	7

	Properties of the hardened material
Bending strength, N/mm ²	min. 30
Compressive strength, N/mm ²	min. 30
Shore D hardness (D) (after 7 days), 15 s	74-78
Thermal conductivity, W/(mK)	0,72
Water absorbtion, at 25°C, 96 hours , %	0,1-0,15
Glass-transition temperature (Tg), °C	54
Dissipation factor,tgδ (20 V 800 Hz) at 24,5°C	0,27
Breakdown strength, kV/mm at 25°C	min. 18
Specific surface resistivity Ohm	min. 2,4 x10 ¹²
Specific volume resistivity, Ohmxcm	min. 9,5 x10 ¹⁴
Combustability (thickness 6 mm)	V-0

UL registration nr.: E338747

Information on application

1. In case of manual application:

- During mixing the temperature of the components should be between 15-25 °C. At higher temperature gel time decreases, that makes application more difficult.

- Prescribed mixing ratio has to be respected at every mixing.

- After pouring them together the components have to be mixed accurately till receiving absolute homogeneity and applied as soon as possible.

-Casting process should be begun by preparing the workpieces in a quantity, that can be casted with resin obtained by one mixing within potlife.

- Component "A" should always be mixed up properly to eliminate any sedimentations. After that the necessary amount of comp. "A" should be poured into a clean pot and the calculated amount of component "B" can be added afterwards.

-Mixture should be used within potlife. Material of increased viscosity or with begun gelling must not be used.

2. In case of power-driven application: according to the instructions of the equipment.



- For cleaning tools and brushes Vilepox H-3 should be used.

Labour safety information

Labour safety and environmental information is detailed in the "Safety data sheets" of the product.

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