



TECHNICAL DATA SHEET

Vilepox® B-300 resin system

Field of application: Thixotropic system, that can be easily applied as a coating resin in thick (1-2mm) layer without flowing. It is widely used in such areas as post-coating of coils and filling out the gap between the commutator and the wires of rotors in commutator motors.

Gives excellent overall features and thermal resistance and easy application. Hardens at room-temperature.

Characteristics:

- excellent dielectric properties
- excellent mechanical properties
- good thermal resistance, Class B
- excellent chemical resistance
- a system free of solvents

Specification of the components

	Vilepox® B-300 „A”	Vilepox® B-300 „B”
Characteristics:	modified, solvent-free epoxy resin containing inorganic fillers	a low viscosity, aliphatic-polyamine based hardener of high reactivity
Appearance:	coloured, thick, thixotropic liquid *	yellowish-brown liquid
Density at 25 °C, g/cm³	1,28 - 1,38	1,05-1,1
Viscosity at 25°C, mPas	n.a.	3400-5000
Outflow (Fordcup 8, at 25°C, s)	n.a.	
Outflow (Fordcup 6, at 25°C, s)		150-250
Colour by Gardner		< 5
Flashpoint, °C	> 150	
Non-volatile matter content %	99,8	
Total chlorine content, %	< 0,2	
Shelf-life	min. 12 months**	min. 12 months
Storage	in tightly closed, original containers at 5-20°C, in a dry place far from heaters	
Flammability	III. grade	III. grade

* Standard range of colours: cc. RAL 3013 red, cc. RAL 6002 green, cc. RAL 9017 black
Other colours are also available on request.

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



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Specification of the mixture

VILEPOX® B-300 component „A”	100	parts of mass (kg)
VILEPOX® B-300 component „B”	15	parts of mass (kg)

	Properties of the mixture:
Gel time at 25°C, 100g, min	15-25
Initial viscosity at 25 °C, mPas	thixotropic, n.a.
Potlife at 25°C, min	appr.10
Hardening time at room temperature, hours	appr. 24
Hardening time at 100°C, min	appr. 3-4

	Properties of the hardened material:
Bending strength, N/mm ²	min. 80
Compression strength, N/ mm ²	min. 100
Tensile strength, N/mm ²	min. 60
Water absorbtion at 25°C, %	max. 0,2
Martens value *, °C	min. 110
Dielectric strength at 25°C-on kV/mm	min. 12
Specific surface resistivity Ohm	min. 10 ¹⁵
Specific volume resistivity Ohmxcm	min. 10 ¹⁴

Labour safety information

During work: Closed working-clothes, safety glasses and gloves have to be worn.

Skinprotection: A skin-protective cream has to be applied on hands before starting work.

Removing the material from the skin: The material has to be absorbed with a dry clothes or paper and the skin has to be washed with soapy warm water and dried. Afterward it has a protective cream has to be used. The dirty paper or clothes used for absorbtion should be disposed to a plastic container or sack.

Ventilation: The working place has to be ventilated 3-5 times an hour. Workers should avoid breathing in the vapours.

Eye-protection: Attention! Due to its alkalinity component „B” of Vilepox B-300 is especially dangerous for eyes. Therefore using protective glasses is a must.

First-aid: In case the material gets into the eyes, they should be rinsed thoroughly with water for 15 minutes and the worker should see a doctor as soon as possible. From skin the material should be removed as above. Contaminated clothes should be taken off immediately. In case somebody feels unwell after breathing in vapours he has to be taken on open air and see a doctor as soon as possible.

The hardened material is physiologically not harmful. Labour safety and environmental information is detailed in the „Safety data sheets” of the product.



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Information on application

- During mixing the temperature of the components should be between 15-25 °C. At higher temperature both viscosity and gel time decrease, while warming during bonding increases. At lower temperature viscosity and gel time increases, warming during bonding decreases.
- Prescribed mixing ratio has to be respected at every mixing.
- Component „A” must be mixed thoroughly before use to eliminate sedimentations. After that the necessary amount of comp. „A” should be poured into a clean pot and then the measured amount of component „B” can be added.
- 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 .
- Mixture should be used within potlife. Material of increased viscosity or with begun gelling must not be used.
- For cleaning tools and brushes Vilepox H-3 should be used.

If you have any further questions regarding this system do not hesitate to contact us.

Information contained in this data sheet has been collected on the basis of our best engineering knowledge, however, it is not intended to provide any legal commitment.

Vilepox® B-300 ENG 3.

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