



TECHNICAL DATA SHEET

VILEPOX[®]/VILTER[®] systems Vilepox[®] U-361/40 potting/encapsulating resin system

Temporary data sheet

Application:

Two-component, PUR system hardening at room temperature. Suitable for potting/encapsulation of small and medium-voltage devices, transformers, capacitors, windings, ect.

Characteristics:

- „B” class, working temperature -25-130 °C
- hard type
- very good dielectric properties
- very good mechanical properties
- good thermal conductivity
- available in natural and colour versions
- low viscosity, bubble free castings
- good processibility
- free of solvents and halogens
- satisfies the requirements of RoHS

Specification of the components:

CHARACTERISTICS	STANDARD	UNIT	VALUE	
			VILEPOX U-361/40 component „A”	VILEPOX U-361/40 component „B”
Description	-	-	a special polyol with inorganic fillers*	polyisocyanate hardener
Appearance	HSZ 003	-	greyish white, viscous liquid **	brown transparent liquid
Density (25 °C)	HSZ 004 (ISO 1675)	g/cm ³	1,49 – 1,53	1,20 – 1,24
Viscosity (25°C)	HSZ 010 (ISO 2555)	mPas	2200 - 3200	70 - 110
Storage conditions	-	-	in a dry place far away from direct heat, in tightly closed containers at 5-25°C	
Storage stability	-	month	min. 6	min. 6
Packaging ***	-	kg	30	9,9
Transport	-	-	metal can	metal can
Inflammability	-	grade	III.	III.

* Sedimentation is allowed

** Other colours are also available on request

*** Other packaging is also available on request



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Specification of the mixture:

Mixing ratio: **VILEPOX U-361/40 component „A”** **100 parts of mass (kg)**
 VILEPOX U-361/40 component „B” **33 parts of mass (kg)**

CHARACTERISTICS	STANDARD	UNIT	VALUE
Gel time (25°C, 100 g)	HSZ 001	minutes	25 - 45
Density (25 °C)	HSZ 004 (ISO 1675)	g/cm ³	1,41 - 1,46
Initial viscosity (25 °C)	HSZ 010 (ISO 2555)	mPas	1500 - 2500
Potlife: (25°C, 50 g)	HSZ 010 (ISO 2555)	minutes	8 - 14
Time of doubling of viscosity			
Time of tripling of viscosity			
Hardening time at room temperature	-	hours	appr. 24
Full hardening at room temperature	-	days	appr. 7

Suggested curing conditions: room temperature, +5°C -+25°C, 45-55 % RH **

** **Attention!** In case of humidity higher than 55-60 % bubbles may arise in castings.

Properties of the hardened material:

CHARACTERISTICS	STANDARD	UNIT	VALUE
Thermal conductivity	DIN VDE 0304	W/m·K	> 0,47
Tensile strength	ISO 527	N/mm ²	> 20
Elongation at break	ISO 527	%	>10
Shore D hardness 15s	ISO 868	-	83 - 85
Water absorption (25 °C, 24 h)	ISO 62	%	< 0,15
Specific volume resistivity	IEC 93	Ω x cm	>10 ¹³
Specific surface resistivity	IEC 93	Ohm	>10 ¹²
Dielectric strength (at 25°C)	IEC 243	kV/mm	>18



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Information on application:

1. In case of manual application:

- During mixing the temperature of the components should be between 15-25 °C.

Casting process should be begun by preparing the workpieces in a quantity, that is casted with resin obtained by one mixing during pot life (Time of doubling of viscosity).

- Component „A” should always be stirred up thoroughly before use to avoid possible sedimentation.
- Prescribed mixing ratio has to be respected at every mixing.
- After pouring together, the two components have to be mixed accurately till receiving absolute homogeneity.
- For cleaning the tools and brushes Vilepox H-3 should be used.

2. In case of Automatic (powered) application:

- According to the machine specific instructions

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

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, then creamed with a protective cream afterwards. The dirty paper or clothes used for absorption should be disposed to a plastic container or sack.

Ventilation: Give adequate ventilation to the premises where the product is stored and/or handled Workers should avoid breathing in the vapours.

First-aid: In case the material gets to 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.

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

The 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.

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