



TECHNICAL DATA SHEET

Vilepox[®] PE-43 insulating varnish

Field of application:

Vilepox PE-43 is a modified polyester based air-drying varnish containing solvents. It is suitable for „F” class application, has good adhesion to all type of surfaces and may be used either for coating or impregnation. The coating is hard, glossy and elastic. Thanks to its good levelling it gives a nice, smooth coating and its low viscosity helps perfect penetration during impregnation.

In case faster drying is necessary it can be baked in an oven for a short time. It improves final properties at the same time.

Benefits:

- Thermal-class „F”
- Fast drying
- Low viscosity, the varnish penetrates to capillaries
- Good bonding strength
- Tough and durable coating
- Excellent thermal-resistance
- Excellent resistance to acids and bases

	Specification of the varnish
Appearance	brown, transparent liquid
Density (25 °C-on), g/cm³	0,93-0,98
Outflow at 25°C-on, s/Fordcup3	30-70
Air-drying time, powderdry, min	appr. 10
Full air-drying, hours	appr. 1
Corrosive effects on Copper	nem okoz korróziót
Storage	min. 12 months in tightly closed, original containers at 5-20°C, in a dry place far from heaters
Shelf-life	min. 12 months
Inflammability	II. grade, Flammable and explosive
Thinner	Vilepox [®] H-3



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	Specification of the hardened material
Dielectric strength (ASMD 115) kV/mm	72
Dielectric strength (ASMD 115) after 24 hours of dipping into water, kV/mm	30
Resistance to chemicals: - Water - 10% solution of sulfuric acid - 1% base solution - Salty water - Petroleum	excellent excellent excellent excellent sufficient

Compatibility with magnet wire varnishes:

Vilepox PE-43 is compatible with the following magnet wire varnishes:

Epoxy	Textile insulations	Polyurethan
Poliurethan-polyamide	Polyvinyl formal	Polyvinyl formal-polyamide
Polyamide	Polyamide-imide	Polyester
polyester-amide-imide	Polyimide	

Information on application

Vilepox PE-43 is used for the following products:

- stators of motors
- coils
- transformers
- printed-circuits
- condensers

Vilepox PE-43 may be applied with dipping, brushing and spraying. It dries fast on air, but may be baked to improve its resistance to chemicals and petroleum. Baking should be made at 150°C- for appr. 10-15 minutes.

Suggested method of baking:

- preheat parts to be coated at 110°C for 10 minutes
- dip the parts into the varnish for 15 seconds
- drain for 45 seconds
- bake at 150°C for 10-15 minutes or at 165°C for 5 minutes

Can be thinned with Vilepox H-3 thinner.

Preheating of parts for 10 minutes is recommended, but not compulsory.



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

- Premises must be permanently ventilated during work with Vilepox PE-43.
- Avoid contact with skin and eyes.
- Protective clothes and glasses must be worn during work.
- In case after all the varnish gets on the skin it must be washed with water and inactive soap.
- In case the varnish gets in the eyes, they have to be rinsed thoroughly for 10-15 minutes and shown to a doctor shortly afterwards
- Regulations regarding materials of II. grade of flammability must be strictly kept during work.

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

May, 2012.
Vilepox PE-43 ENG 3.