
Voltatex® 2020 Alkyd finishing varnish

Voltatex® 2020 is a red or grey pigmented, air-drying, 1-c-finishing-varnish with especially excellent adhesion to metals and plastics based on modified alkyd resin.

Attributes

Pigmented varnish that dries fast in air with outstanding adhesion to metals and plastics, suitable as additional protection against external influences, particularly against moisture. Compatible with all common enamelled wires. Voltatex® 2020 has corrosion-protective properties. In combination with Voltatex® 1-c dipping resin the standards of DIN 5510-2 (preventive fire-protection in rail vehicles) can be fulfilled - depending on certain components and applications.

Application

Electrically-insulating finish on impregnated coils, windings and other components in electrical engineering and electronics.

Standards

- RoHS-compliant acc. 2011/65/EC
- Polybromited Diphenylether acc. 2003/11/EC

Delivery forms

12.1 kg can or 20 kg barrel

Color

Red or grey pigmented.

Storage

Voltatex® 2020 can be stored at room temperature in sealed containers for 12 months (max. 25 °C). The varnish must be stored in a proper location protected from direct sunlight, UV radiation and sources of heat. Always observe the standard official rules and regulations.

Hardening

Curing is possible in explosion-protected environments beneath a fume hood under the following ambient conditions:

Air-drying times at 23 °C and 50 % rel. humidity:

0.5 h dust-dry

2 h touch dry

48 h entirely dry

Air-drying times at:

40°C - 20 h entirely dry

50°C - 16 h entirely dry

60°C - 3.5 h entirely dry

80°C - 1 h entirely dry

Protection

Cured Voltatex® 2020 is biologically inactive and not damaging to health. Always refer to the safety data sheet.

Processing

Voltatex® 2020 can be used as dip coating, painting or spraying. Because the pigments and fillers of this varnish can sediment after long-time storage, Voltatex® 2020 should be well stirred before usage. In order to achieve an optimum viscosity up to 15 % Voltatex® T023 can be added.

Cleaning

Equipment should be cleaned promptly using Voltatex® T023 solvent. Maintenance and care of coating plants, especially cleaning, must be carried out according to operational requirements. Always refer to the operating instructions of the plant.

Mechanical	Unit of measure	Conditions	Values	Test method
Colour			red or grey pigmented	
Dilution		thinner Voltatex® T023	7:1	acc. IEC 60464-2, pt. 5.5
Tack		at 23 °C and 50 % r.H.	tack-free after 4h	
Flow time	s	Grey, 23 °C	65 ± 10	DIN 53211
Flow time	s	red, 23 °C	100 ± 25	DIN 53211

Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength at 23 °C and 50 % r.h.	kV/mm		60	IEC 60464-2
Specific volume resistance	Ω*cm	after 7 d water storage	7.7 x 10 ¹²	IEC 60464-2, pt. 6.5.1
Loss factor cross section 0.2=200x10 ⁻³	°C		≥78	IEC 60464-2, pt. 6.5.2