
Voltahyd® 2220 Polyacrylate Coating Varnish

Voltahyd® 2220 is water-based, red-pigmented, air-drying 1-component hybrid topcoat.

Attributes

Voltahyd® 2220 is a water-based, ready to use, quick drying and pigmented topcoat with good adhesion to steel, galvanized substrates and aluminium. It is suitable for additional protection against external influences, especially against humidity and corrosion. Voltahyd® 2220 has also a good adhesion to impregnating resins* respectively on impregnated goods.

*tested on styrene based impregnating resins

Standards

Railway applications EN 45545-2:2013 + A1:2025 - Fire protection on railway vehicles.

Delivery forms

1 kg cans or 20 kg cans (non-returnable) or 200 kg drums (non-returnable).

Color

Red

Storage

A temperature range of above 5 °C and below 35 °C is recommended as storage temperature. As Voltahyd® 2220 is a water-based product, it must be protected against frost! In originally closed delivery items, the product has a shelf-life of 6 months. Opened containers have to be closed tightly after material withdrawal!. We recommend storing the product between 20-25 °C.

Hardening

Air-drying at room temperature (20-25 °C) is preferred for this product:

- 45-60 min tack free
- 2-3 h touch dry
- 24-36 h ready to assemble

Accelerated drying:

- 60-70 °C: 2-3 h ready to assemble

Protection

Voltahyd® 2220 is intended for industrial / professional usage only. For further information please refer to the safety data sheet.

Processing

The coat can be applied to the object by dipping, brushing or spraying. Since the pigments and fillers contained in the coating may settle over time, Voltahyd® 2220 should be thoroughly stirred before application. Adding Voltatex® T041 is possible to adjust the optimal processing viscosity of Voltahyd® 2220.

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.

Updated 01/25



Mechanical	Unit of measure	Conditions	Values	Test method
Colour			Red	
Density	g/cm ³	20 °C	1.05-1.25	
Flow time	s	DIN Cup 4	70-150	DIN 53211
Viscosity	mPas	25 °C	200-450	DIN 53019

Liquid phase	Unit of measure	Conditions	Values	Test method
VOC	%		<5	2010/75/EU
Curing time	h	20-25 °C	24-36	
Curing time	h	60-70 °C	2-3	
Solids content	%	Red	40-50	

Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm	unstressed	>70	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH
Dielectric strength	kV/mm	168 h at 92 % RH	>40	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH

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Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm	168 h at 160 °C	>70	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH
Volume resistivity	Ω*cm	unstressed	10 ¹¹	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH
Volume resistivity	Ω*cm	168 h at 92% RH	10 ⁸	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH
Dielectric strength	Ω*cm	168 h at 160 °C	10 ¹⁴	IEC 50455-2, IEC 60464-2 at 23 °C/50% RH
Grid cut		unstressed	GT 0-1	DIN 53151
Grid cut		168 h at 92% RH	GT 0-1	DIN 53151
Grid cut		168 h at 160 °C	GT 0-1	DIN 53151

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