

TYPE

Water dilutable, heat-crosslinking Phenol/Epoxyde-pre-condensate

FORM OF DELIVERY (f.o.d.)

52 % in water (52WA)
(containing also approx. 2 % n-butanol)

USES

PHENODUR® VPW 1942 is a formulated phenolic/epoxyde system, intended as sole-binder for the interior and exterior coating of metallic packaging materials and for corrosion resistant industrial stoving systems. PHENODUR® VPW 1942 shows very low emission of cleavage products and contains practically no free phenol.

PRODUCT DATA

Determined per batch:

Dynamic Viscosity (Ubbelohde) DIN 53177

dynamic viscosity	[mPa.s]	100 - 1000
(23 °C)		

Non-Volatile Matter DIN EN ISO 3251

non-volatile matter	[%]	50 - 54
analogue DIN EN ISO 3251		
(1 h; 135 °C; 2 g; n-butanol)		

Not continually determined:

pH-Value DIN ISO 976

pH-value		7,0
approx.		

Density (Liquids) DIN EN ISO 2811-2

density	[g/cm ³]	1,12
approx.		
(20 °C)		

Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
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DILUTABILITY

PHENODUR® VPW 1942 is unlimited dilutable with deionized water. Water, in combination with organic solvents e. g. butyl glycol is suitable too.

COMPATIBILITY

PHENODUR® VPW 1942 is designed as sole-binder, the compatibility with other resins is limited. Combinations with other polymer dispersions and water-dilutable melamine resins are possible, storage stability and compatibility have to be tested in advance. Such additions of other resins might influence the rheological behaviour of PHENODUR® VPW 1942 greatly.

PROPERTIES AND USES

For spray applications, PHENODUR® VPW 1942 has to be diluted with water in the usual ways. For applications on roller coaters, the viscosity should be increased by means of thickening agents and/or organic solvents like hexylglycol. In both cases, additions of organic solvents like hexylglycol improve flow and surface wetting and reduce the tendency of a quick physical drying.

The usual stoving cycle is 12 min at 200°C, "shock-curing" at PMT's of approx. 300 °C is possible.

The cured films are at a thickness of approx. 5 µm exhibit a golden colour and very good adhesion, corrosion protection, flexibility and solvent resistance.

STORAGE

At temperatures up to 25°C storage stability packed in original containers amounts standard to 730 days. It is important to protect PHENODUR® VPW 1942/52WA from frost. Frozen product is unsuitable for further use. As a result of low organic content of this waterborne dispersion, the product may exhibit a tendency for a minor skin formation and/or particle formation on the surface of the packaging container due to rapid drying. Filtration or other means of removal of the solid/semi solid material is recommended before usage. This phenomenon has no impact on the quality of the product.

The expiration date may be extended and COA updated after QC testing of retained samples, only for material in allnex possession.

SAFETY AND HANDLING

Please consult the Safety Data Sheet (SDS) for safety, health, and environmental data available from allnex.

DISTINGUISHING FEATURES

PHENODUR® VPW 1942 is, for the time being, unique in our product range.