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LAMINATING RESIN

HAVELPOL 1

Instruction for use, technical specifications

Characteristics	
Approval:	-
Application:	is pre-accelerated polyester resin for general use.
Operational temperature:	+10°C to + 30 °C
Processing:	At temperatures between 18 °C - 30 °C All usual processing methods
Special properties:	Standard laminating resin Pot life from approx. 10 min. to 30 min.

Laminating curing systems for curing at room temperatures

Was specifically created for non-critical Applications, was formulated in such a way that it occurred at a rapid curing. Lamination can be performed using manual application or spraying. The preparation HAVELPOL1 is available in colour and information contained in this sheet also applies to this resin. The preparation can not be colour-customized to specific requirements.

The temperature of the composition HAVELPOL 1 before use should reach a temperature workshop (18-20 ° C). Product mix well by hand or using a slow stirrer to avoid aeration, and then wait to restore thixotropy. To initiate the curing reaction only necessary to add a catalyst.

The recommended catalyst is a peroxide K1 Butanox M50 or M30, which should be added to the resin in an amount of 1 to 2%. The catalyst is required for this resin was thoroughly incorporated, if possible using a slowly rotating stirrer.

Application

The systems are suitable for the production of parts with reinforced fiberglass, whose features are high flexibility, toughness and adhesion to most material.

Pot life varies from about 10 min to 30 min. Thanks its excellent adhesive attribute, these systems can also be used as an adhesive for wood. Fillers (eg metal powder, dust, cotton flakes, etc.) can be blended to achieve special properties of the system. Elongation 1% is preferred for use as laminating resins. Strength shear resistance and peel is lower than our special resins.

Specification of Laminating resin Havelpol 1

		Laminating resin Havelpol 1
Density	g/cm ³ / 25 °C	1,2
Viscosity	mPas / 25 °C	thixotropic
VOC content	-	40%
Stability in darkness at 20°C		3 months
Colour		Not transparent

Properties of cured resin

		Havelpol 1
Hardness Barcoal		24
Water absorption during 24h at 23°C		38 mg
Ultimate tensile strength		35 MPa
Tensile modulus		2200 MPa
Elongation at break		1%
Heat treatment		24 hours at 20°C than 3-5 hours at 80°C

Storage

The resin can be stored for at least 3 month in the carefully sealed containers at temperatures +20°C to +25°C. Temperature should not be over +30°C.

If resin create gel, do not use gel parts. Use only "liquid" resin.

Do not warm up over an open flame! While stirring up use safety equipment (gloves, eyeglasses, respirator).

Mixture ratios

		Havelpol 1:katalyst
Parts by weight		100 : 1-3
Parts by volume		100 : 1-3

The specified mixture ratios must be observed as exactly as possible. Adding more or less hardener will effect a faster or slower reaction. The mixture of resin and

katalyst must be mixed very thoroughly. Mix until no clouding is visible in the mixing container. Pay special attention to the walls and the bottom of the mixing container. The optimal processing temperature is in the range between 20 and 25°C. Higher processing temperatures are possible, but will shorten pot life. A rise in temperature of 10°C will halve the pot life. Different temperatures and humidities during processing have no significant effect on the strength of the hardened product.

Warning

Do not mix large quantities, especially if highly reactive systems are used. The heat flow from the mixing container is very low, so the contents will be warmed up very fast because of the reaction heat (exothermic resin – katalyst reaction). This can cause temperatures > 200°C which causes smoke intensive burning of the mixture.

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