

Product Data Sheet

Palatal E 200-01

Chemical/physical nature

Palatal E 200-01 is an unsaturated polyester resin based on orthophthalic acid, adipic acid and neopentyl glycol, dissolved in styrene.

Palatal E 200-01 has a low reactivity and a low viscosity.

Major applications

Palatal E 200-01 can be used with or without fillers to make highly impact resistant, flexible mouldings with good dielectric properties and resistance to hydrolysis.

If mixed with other Palatal/ Synolites, it improves the flexibility and toughness of these resins.

Furthermore, Palatal E 200-01 (also in a mix with Palatal A 410-01) is recommended as an excellent adhesion layer between rigid PVC and GRP-UP/VE.

Approvals

Cured unreinforced Palatal E 200-01 conforms to type 1100 according to DIN 16946/2.

Product specifications upon delivery

Property	Range	Unit	TM
Appearance	clear	-	2265
Colour, Lico 200	0-80	APHA	2017
Viscosity, 23°C	300-350	mPa.s	2013
Solids content, IR	63-67	%	2033
Cure time from 25 to 35°C	17-21	Min	2625
Cure time from 25°C to peak	38-46	Min	2625
Peak temperature	60-80	°C	2625

Remarks

Viscosity measurement: Z 2/100 s⁻¹/23°C

Reactivity determined with 1.0 g Trigonox 44 B (AKZO-Nobel) and 1.0 g Accelerator NL 49 P (AKZO-Nobel) added to 100 g of resin.

Properties of the liquid resin (typical values)

Property	Value	Unit	TM
Density, 23°C	1100	kg/m ³	-
Refractive index	1.5100	-	2150
Flash point	33	°C	2800
Acid value, as such	17	mg KOH/g	2401
Stability, no init., dark, 25°C	6	Mon	-

Typical values of cast unfilled resin

Property	Value	Unit	TM
Tensile strength	11.5	MPa	ISO 527-2
Mod. of elasticity in tension	0.08	GPa	ISO 527-2
Elongation at break	60	%	ISO 527-2
Impact res. - unnotched sp.	81	kJ/m ²	ISO 179
Glass transition temp. (Tg)	45	°C	DIN 53445

Cure conditions

Cured with 1 ml MEKP-HA 2 (Peroxid Chemie GmbH) and 0.2 ml Co-oct. solution (1% Co in styrene) added to 100 g resin. Cured for 24 h at room temperature and 24 h at 80 °C

Processing

Palatal E 200-01 does not normally exhibit tack-free cure. To ensure tack-free curing of surfaces exposed to air, suitable additives (e.g. paraffin solution) should be added.

Guidelines before use

The resin should be conditioned at a well defined, application dependant temperature (usually 15°C minimum for a MEKP/Co cure).

Storage guidelines

The resin should be stored indoors in the original, unopened and undamaged packaging, in a dry place at temperatures between 5 °C and 30 °C. Shelf life is reduced at higher temperatures and the properties of the resin might change during storage. The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

Material Safety

A Material Safety Data Sheet of this product is available on request.

Test methods

Test methods (TM) referred to in the table(s) are available on request.

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