

POLYLITE® 440-M850

Standard Orthophthalic Polyester Resin

DESCRIPTION

POLYLITE® 440-M850 is a medium reactive orthophthalic polyester resin.

POLYLITE® 440-M850 is thixotropic and has a built-in accelerator system giving medium gel time, rapid curing combined with relatively low exothermic temperature and short demolding time.

POLYLITE® 440-M850 contains special additives which improve the working environment during and after application due to substantially reduced styrene evaporation. The resin contains wax which gives the cured laminate a tack-free surface.

APPLICATION

- POLYLITE® 440-M850 is a hand layup/sprayup resin.
- POLYLITE® 440-M850 is designed for marine, industrial and transport application.

Recommended laminate thickness applied wet-on-wet: 2-8 mm.

FEATURES

- Excellent application properties
- Medium reactivity
- Approvals

BENEFITS

- Short application time
- Good fiber wetting
- Higher fiber content
- Good curing
- Short demoulding time
- Det norske Veritas, DNV, grade 2
Lloyd's Register of Shipping
Bureau Veritas
Germanischer Lloyd
Russian Maritime register

POLYLITE® 440-M850 meets the requirements of type 1110 as defined in DIN 16946 for mechanical and thermal properties.

TYPICAL PROPERTIES

PHYSICAL DATA IN LIQUID STATE AT 23°C

Properties	Unit	Value	Test method
Viscosity			
- Brookfield Model LVF, Spindle 2 at 12 rpm	mPas(cP)	1100-1300	ASTM D 2196-86
- Cone & Plate	mPas(cP)	170-200	ISO 2884-1999
Specific gravity / Density	g/cm ³	1,10	ISO 2811-2001
Acid number (max.)	mgKOH/g	24	ISO 2114-1996
Styrene content	% weight	44 ± 2	B070
Flash point	°C	32	ASTM D 3278-95
Gel time: 1% NORPOL PEROXIDE 1 (MEKP)	minutes	35-45	G020
Storage stability from date of manufacture	months	6	G180

TYPICAL NON-REINFORCED CASTING PROPERTIES

Fully post cured.

Properties	Unit	Value	Test method
Tensile strength	MPa	50	ISO 527-1993
Tensile modulus	MPa	4600	ISO 527-1993
Tensile elongation	%	1.6	ISO 527-1993
Flexural strength	MPa	90	ISO 178-2001
Flexural modulus	MPa	4000	ISO 178-2001
Impact strength P4J	mJ/mm ²	5.0-6.0	ISO 179-2001
Volume shrinkage	%	5.5-6.5	ISO 3521-1976
Heat distortion temp.	°C	62	ISO 75-1993

STORAGE

Store in the shade, out of direct sunlight. Keep storage temperature below 25° C. Unseal container just before use. Shelf life will be reduced reaching higher temperature.

SAFETY

READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET BEFORE WORKING WITH THIS PRODUCT

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