

PRODUCT CODE: C200036

POLYPLEX CLEAR ORTHO CASTING RESIN is a pre-promoted, low reactivity, orthophthalic polyester resin especially formulated for use in clear casting applications. The resin is pre-promoted for room temperature cure with methyl ethyl ketone peroxide (MEKP) initiators. POLYPLEX CLEAR ORTHO CASTING RESIN is non-thixotropic and wax-free.

FEATURES

- Positive cure characteristics after gelation
- Low colouration and excellent clarity in castings
- Low exotherm cure characteristics following gelation
- Non thixotropic

BENEFITS

- Allows rapid cycle times
- Suitable for colour critical clear casting applications
- Reduced tendency towards shrinkage problems in thick cast sections
- Air release is unimpaired

RECOMMENDED CATALYST

Curox MEKP NR20
Norox MEKP 9

TYPICAL LIQUID RESIN PROPERTIES @ 25°C

PROPERTY	TYPICAL VALUE	TEST DETAILS
Appearance	Clear liquid	
Viscosity	300 - 450 cP	Brookfield RVT sp.3/100 rpm
Gel Time (1% MEKP Curox NR20)	15 – 20 minutes	100 gram mass
Density	1.10 gcm ⁻³	
Flash Point	31C	Setaflash
Styrene Content	36 - 39% w/w	
Shelf Life (when stored in original closed container in the shade)	6 months	

TYPICAL CAST RESIN PROPERTIES (FULLY POSTCURED)

PROPERTY	TYPICAL VALUE	TEST DETAILS
Hardness	40 - 45	Barcol (GYZ 934-1) EN 59
Density	1.19 gcm ⁻³	ISO R1183
Volume Shrinkage	7-8%	ISO 3521
Tensile Strength	70 MPa	ISO R527
Flexural Strength	105 MPa	ISO 178
Elongation at break	2.0%	ISO R527
Heat Distortion Temperature	60 - 65°C	ISO 175 (1.8MPa)

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, polyester resins should be stored in closed containers, away from heat sources and sunlight. The resin should be stored away from all sources of ignition. Stored resin quantities should be kept to a reasonable minimum and used on a first in/first out stock rotation basis.

STANDARD PACKAGING

Mild Steel Drums (225kg)
Always refer to the MSDS before use