

PRODUCT CODE: C200053

POLYPLEX 4202P is a pre-promoted, orthophthalic polyester resin, specifically formulated for use in the manufacture of FRP sheeting. It is suitable for use on an automated line or by the hand lay-up method and formulated for use with Cumene Hydroperoxide initiator.

FEATURES

- Good clarity
- Superior wet-out of glass fibre
- UV stabilized
- Promoted for elevated temperature cure

BENEFITS

- Aesthetically appealing appearance. Able to be enhanced with light tints.
- Allows ease of fabrication and elimination of dry spots
- Good resistance against UV degradation
- Uses Cumene Hydroperoxide (CHP) catalyst

SUGGESTED USE

Product can be used for fabrication of FRP Sheeting for general purpose use.

RECOMMENDED CATALYST

We recommend using Cumene Hydroperoxide (CHP) catalyst for this resin.

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Appearance	Clear Pale Amber	Visual
Viscosity	300 - 320 cP	Brookfield #3/100 @ 25°C
Density	1.10 g/cm ³	@25°C
Geltime (Elevated Temp)	3.5 – 4.5 mins	@60°C, 1.2% CHP
Geltime (Room Temp)	22 – 27 mins	@25°C, 1.5% CHP
Flash Point	31°C	Tag Closed Cup
Shelf Life	6 Months	When correctly stored
Volatile Content	36.5 – 38.50 %	20 mins @ 105°C
SPI Reactivity (82°C, 1% CHP)		
Time (66°C – 88°C)	28 – 35 sec	228.9_0
Time (66°C – Peak Exotherm)	85 – 105 sec	228.9_3
Peak Exotherm	210 – 240°C	228.9_2

Typical values: Based on materials tested in our laboratories, but varies from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

TYPICAL CAST UNFILLED RESIN PROPERTIES

Properties	Typical Value	Test Details
Barcol Hardness (GYZ 934-1)	45	EN 59
Volume Shrinkage %	7 – 8	ISO 3521
Tensile strength, MPa	60	ISO R527
Flexural strength, MPa	100	ISO 178
Flexural modulus, GPa	4	ISO 178
Elongation at break %	2	ISO R527
Heat Deflection Temperature (1.8MPa), °C	70 – 75	ISO 75

The values quoted above are typical for the properties listed for fully post-cured castings – cured at room temperature for 24 hours and then post cured at 125 – 130°C for 2 – 3 hours.

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. Prolonged storage, or unfavourable storing conditions, may cause separation, therefore agitation of the resin before use is recommended.

STANDARD PACKAGING

Haztainer (1,000kg)
Isotainer (20,000Kgs)

Always refer to the MSDS before use.