



TECHNICAL DATA SHEET

ISOPHTHALIC GELCOAT LRPOL022-GC

General Description:

Unsaturated isophthalic polyester resin (**LRPOL022-GC**) is a Pre-Promoted, UV Resistant gel coat based on Isophthalic unsaturated polyester resin. It is cured using MEKP peroxide.

Applications and Uses:

The product is easy to use with highly controlled rheological properties providing high resistance to sagging. This product has good resistance to yellowing over time. It has good gloss retention properties. This product has good water resistance properties. This product has resilient mechanical properties.

This gel coat is formulated to meet the rigid requirements of transportation, boating and sanitary applications.

Appearance:

The product is available in clear, white, off-white and wide range of RAL colours and can be colour matched according to a particular demand. The product is formulated to assure a hide in wet film thickness of 500µm. However, some bright shades may have a hide slightly lower opacity.

Moulding Information:

- Hand lay up
- Spray up

Typical Properties for Isophthalic Resin:

Table 1: Specification of Liquid Resin				
No.	Property	Test Method	Unit	Value
1	Viscosity at 25°C (LV4 , Rpm 12 , 120sec)	ISO 2555:2018	mPa.s	10000-20000
3	Stability at 20°C	-	Days	45
4	Non-volatile-matter content	ISO 3251:2019	%	Min 55%
5	Gel Time @ 25°C	ASTM D2471-99 ISO 2535:2001	Minutes	10-20
6	Gel to Peak Time		Minutes	10-15
7	Peak Exothermic Temperature		°C	120-160

Note :Properties can be adjusted based on the customer's requirements.

Contacts us:

Light Industrial Area, street # 709, Zone No: 92, Mesaieed
Industrial zone, Qatar PO Box: 1985. T: (+974) 445 09433, E:
info@lrf.com.qa
Factory Manager M: (+974) 55828142
Technical Inquiries:+974 74025490





No.	Property	Test Method	Unit	Value
1	Tensile Strength	ISO 527-1:2019 ISO 527-2: 2012	MPa	Min 70
2	Tensile Modulus		MPa	Min 3400
3	Elongation at break		%	Min 3
4	Barcol Hardness	ASTM D 2583-13a (934-1)	-	Min 45
5	Heat Deflection Temperature † (1.80 MPa)	ISO 75-1:2020 ISO 75-2:2013	°C	Min 90

Note : Properties can be adjusted based on the customer's requirements.

Shelf life and Storage:

To ensure maximum stability and maintain Gelcoat properties within the desirable range, Iso gelcoat should be stored in closed containers at temperatures below 25 °C, and away from heat sources such as, but not limited to, direct sunlight, steam pipes or furnaces. Under proper storage conditions the minimum shelf-life performance is estimated at 45 days , provided that the product is stored in the original, unopened container. Shelf life decreases with increasing storage temperature, or when it is kept near a heat source or direct sunlight.

Typical Curing Characteristics and Recommendations

Gelcoat (g)	Catalyst	Temperature °C	Gel Time minutes	Peak Exothermic
100g	Butanox M50/60 1% - 2%	25 °C	10-20	120°C - 160°C

Note : Properties can be adjusted based on the customer's requirements.

LRPOL022-GC should be processed at room temperature (18-25°C) . Lower temperature have an adverse effect om proper curing .Especially when stored in the presence of air ,there may be an increase in the gel time ,although this can be compensated by increasing the amount of curing agent.

Standard Packaging:

The standard packaging available is standard 220 kg stainless steel drums and 25kg plastic cans or as per the request of the customer.

Dot Label Required: Flammable Liquid

Precaution for handling:

Laffan Resin Production Factory (LRPF) maintains and regularly updates the Material Safety Data Sheet (MSDS) of all its products. All supervisory personnel and employees expected to be working with the resin must be provided with the MSDS. Due attention should be given to the precautions for handling chemicals provided in the MSDS prior to any use of this product.

Contacts us:

Light Industrial Area, street # 709, Zone No: 92, Mesaieed
Industrial zone, Qatar PO Box: 1985. T: (+974) 445 09433, E:
info@lrf.com.qa
Factory Manager M: (+974) 55828142
Technical Inquiries:+974 74025490

