

United Oil Projects Company KSC

الشركة المتحدة للمشروعات النفطية



Technical Data Sheet

18 May 2008

UNSATURATED POLYESTER RESIN

KUPOL LR3404

Kupol LR 3404 is a versatile, pre-accelerated, non-thixotropic, rapid curing unsaturated polyester based on orthophthalic anhydride and specifically designed for use in tropical climates. **Kupol LR 3404** has good mechanical and weathering properties.

Characteristics of the resin as supplied:

Physical Unaracteristic	Physical	Characteristics
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I hysical characteristics							
Parameter	Units	Limits	Parameter	Units	Limits		
Non-Volatile Content	%	62 ± 2	Reactive Diluent *	Nil	Styrene		
Brookfield Viscosity (25°C)	cPs	250 - 300	Colour	Nil	Pinkish		
Acid Value (as supplied)	mg KOH/g	35 Max	Density *	Nil	± 1.10		

Curing Characteristics

Parameter	Units	Limits	Curing parameters are determined on a 100 gram
Gel Time @ 25°C	Minutes	10 - 15	sample stabilised at 25°C and catalysed with 2%
Cure Time	Minutes	20 - 30	Methyl Ethyl Ketone Peroxide (50%).
Peak Exotherm	°C	± 185	Methyl Ethyl Ketolie Feroxide (30%).

Properties marked with an * are provided for information purposes only and do not form part of the product specification.

Application Methods

Kupol LR 3404 has been formulated for use in hand or spray lay-up contact moulding applications.

Areas of use

Kupol LR 3404 may be used in any general purpose GRP application where it is resilience and impact strength are of benefit. **Kupol LR 3404** has a fairly low exotherm which enables it to be used in multi-laminate systems where laminates are applied wet on wet. Examples of usage include, but are not limited to, water tanks, kiosks and general jobbing. **Kupol LR 3404** should not be used in any applications requiring a high degree of structural stability and mechanical strength.

Curing

Kupol 3404 is pre-accelerated and requires only the addition of a suitable peroxide catalyst, such as MEKP to affect curing. Although the product will cure with only a 0.5% addition of peroxide, a level of between 1 and 2 % is recommended to achieve optimal mechanical properties

Post Curing

Kupol LR 3404 products should be post cured where optimal mechanical properties are required and/or the product comes into contact with potable water or foodstuffs.

Packaging

Kupol LR 3404 is available in 225Kg net mild steel tight head drums. For alternative packaging requirements please contact our Sales Department.

Storage Stability and Safety

Kupol LR 3404 is stable for a period of 6 months when stored in its original container out of direct sunlight at temperatures not exceeding 25°C. This product contains styrene monomer and requires special care in handling. Please refer to the MSDS and any local statutory requirements

No warranty or guarantee, express or implied, is made regarding the performance or stability of any product since the manner of use and/or conditions of storage are beyond our control.

KCMC are committed to improving all aspects of our product range through continued research and development. As such product composition and/or specifications may change without notice.