

Technical Data Sheet

09 November 2009

GENERAL PURPOSE POLYESTER RESIN

KUPOL LR 1404

**Kupol LR 1404** 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 1404** has good mechanical and weathering properties.

Physical Characteristics			Curing Characteristics		
Parameter	Units	Limits	Parameter	Units	Limits
Non-Volatile Content	%	60 ± 2%	Gel Time @ 25°C	Minutes	10 - 15
Acid Value (as supplied)	mg KOH/g	25 max.	Cure Time	Minutes	17 - 27
Viscosity (25°C)	cPs	250 - 300	Peak Exotherm	°C	± 180

Curing parameters are determined on a 100 gram sample stabilised at 25°C and catalysed 2% Methyl Ethyl Ketone Peroxide (50% ).

**Application Properties**

**Kupol LR 1404** has been formulated for use in hand or spray lay-up contact moulding applications, where mould drainage is not problematic, or in resin injection systems.

**Suggested areas of Utilisation**

**Kupol LR 1404** may be used in any general purpose GRP application where it is resilience and impact strength are of benefit. **Kupol LR 1404** also 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, boat hulls (fresh water), kiosks and general jobbing. **Kupol LR 1404** should not be used in any applications requiring a high degree of structural stability and mechanical strength.

**Curing**

**Kupol LR 1404** 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 1404** laminates should be post cured where the optimal mechanical properties are required and/or the product comes into contact with potable water or foodstuffs.

**Packaging**

**Kupol LR 1404** is available in 225 Kg net mild steel tight head drums. For local deliveries, **Kupol LR 1404** is also available in 1400 and/or 1500 Kg stainless steel totes.

**Storage Stability and Safety**

**Kupol LR 1404** 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 this product for any application as 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.