

SPRAYON PRODUCTS (PTY) LTD

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **FIBRE GLASS RESIN**
Product description: **All Purpose Laminating Resin**

Company identification: **Sprayon Products**
222 2nd Street,
Wynberg Gauteng

Emergency contact no: 011-4440-2202

2. CHARACTERISTICS

Fibre Glass Resin is an all purpose, pre accelerated, unsaturated polyester resin of medium viscosity and mild thixotropy contains saturated acids and has been designed for use in all General Fibre Reinforced Applications where good mechanical properties are required.

Fibre Glass Resin combines good pot life with rapid cure enabling fast mould turn around rates to be achieved. This product is suitable for hand lay up as well as spray applications and may be used in a wide range of industrial mouldings including automotive and marine components. Products manufactured with this resin have a blue-green initial colour which clears away upon cure, thus indicating if the resin has been catalysed and appropriate cure achieved.

3. LIQUID PROPERTIES

PROPERTY	SPECIFICATION
Liquid Appearance	Hazy, dark blue-green
Viscosity Brookfield	300 – 350 cps
Geltime @ 25 deg.C using 2% MEKP - 50	10 – 15 minutes
Acid Value	< 25mg KOH/g Resin
Non volatile content	58 – 62%
Shelf life stability	6 months in the dark @ < 25 deg C, minimum
Thixotropic Index	1.2 min
Specific Gravity @ 25 deg C	1.1 – 1.12

4. PHYSICAL PROPERTIES

PROPERTY	TYPICAL VALUE
Barcol Hardness (GYZJ 934-1)	45 bhu
Volume shrinkage (liquid – solid)	6%
Elongation at break	2.5%
Temperature of deflection (ISOR 75)	85 deg C
Water absorption – 7 days	76 mg
Tensile strength	75 Mpa
Flexural Modulus	4800 Mpa
Flexural Strength	110 Mpa

5. GELTIME CHARACTERISTICS

Fibre Glass Resin is specifically formulated to cure at room temperature using MEKP – 50 (Methyl Ethyl Ketone Peroxide – 50% activity; eg. MEKP, NA1 or Butanox M50). Addition levels should be 2% by weight to ensure that satisfactory cure is achieved at normal workshop temperature (20 – 25 deg C). Catalyst levels of less than 1% or greater than 3% should be avoided. Working temperatures below 15 deg C will affect the final cure of the product and is therefore not recommended. Typical geltimes at different temperatures and catalyst levels can be obtained as a guide from the table below.

PRODUCT TEMPERATURE IN DEG C.	Geltimes in minutes at different catalyst levels				
	1.0%	1.5%	2.0%	2.5%	3.0%
15	77	52	30	20	16
20	54	32	20	15	11
25	30	19	12	9	7
30	22	13	9	6	5
35	16	10	7	4	3

6. HANDLING AND STORAGE

Fibre Glass Resin should be stored under cool conditions (20 – 25 deg C) in closed opaque containers. Exposure to sunlight and/or high temperatures should be avoided since this can lead to premature gelation even in the absence of peroxide catalyst. The storage shelf life of this product under ideal conditions is a minimum of six months from the date of manufacture.

First in first out stock rotation must be adhered to in order optimum performance from this product. If screw top drums are stored outside for any length of time, they should be kept in a horizontal position to avoid any ingress of water.

7. OTHER INFORMATION

This safety data sheet provides the best advice under our current state of knowledge. The user is ultimately responsible for ensuring that the requirements of the relevant legislation are complied with.