

Data Guide

POLYESTER RESIN

PRODUCT DESCRIPTION

A general purpose resin for repair work and hand laid fibreglass laminations.

AREAS OF USE

Fiberglass is a strong lightweight material and is used for many products. Although it is not as strong and stiff as composites based on carbon fibre, it is less brittle, and its raw materials are much cheaper. Its bulk strength and weight are also better than many metals, and it can be more readily moulded into complex shapes. Applications of fiberglass include aircraft, boats, automobiles, bath tubs and enclosures, swimming pools, hot tubs, septic tanks, water tanks, roofing, pipes, cladding, casts, surfboards, and external door skins to mention but a few.

PROPERTIES (at 20°C)

Colour- Blue. Changes colour to green when catalyst added,

Toxicity: toxic - see precautions.

Finish: Satin.

Coverage: One litre of catalysed resin will wet out one sq meter of 450g chopped strand matt. (250 ml for one sq. meter of fibreglass cloth).

Drying Time: Refer curing table later in this document.

Recoating: Up to 7 days at 20 °C.

Pot Life: Refer curing table later in this document.

Mixing Ratio: 1-2% hardener by volume.

Thinning: Can only be thinned with Norski Polyester Thinners - nothing else.

Weight per Litre: 1. 0kg

Volume Solids: N/A

Flash Point: 30 °C (closed cup)

Clean Up: Norski Cleaning Fluid/Acetone.

UN Number: 1866 HAZCHEM 3 Y

PREPARATION

Thorough cleaning is essential for adhesion. Remove all grease, oils, dust and other contaminants. Loose or flaking paint should be sanded back to a stable condition. First roughen smooth surfaces by



sanding with medium sandpaper. The surface to be treated must also be dry before commencing. NOTE: Surfaces such as polystyrene foam need to he previously coated with a water based product to isolate the foam from attack by the polyester.



After the polyester catalyst is mixed into the blue resin, the colour changes to green as the chemical reaction begins, then becomes translucent when cured.

Important: The mixing ratio of catalyst to Polyester Resin is between 1 and 2% of resin volume. *For example*, 100 mls of Polyester Resin will require 1 -2mls of catalyst. (1.5% catalyst is 30 drops per 100mls of resin)

The following table indicates the approximate gel times that can be expected. Increasing the volume (mass) and/or % of catalyst will further reduce the working time available.

% catalyst by	Approximate gel time (in minutes for 100 mls)			
volume	15 °C	20 °C	25 °C	30 °C
1%	57	41	25	20
2%	37	26	16	11

Note Do not mix up more resin than can be applied within 15 minutes at 20°C

APPLICATION

As the areas of use are many and varied, the following is a general guide only.

1. Using a brush, wet the surface surrounding the cracks or holes with a thin coat of mixed resin and immediately lay on the pre-wetted out fibreglass matt patch or glass cloth by pressing it onto the resin.

2. Apply more mixed resin with the brush using a stippling action until the whole area appears clear. Resin starved patches will show as obvious white spots and must be recoated before the resin sets, otherwise these dry spots will have to he cut out later with a sharp knife.

3. After the patch has cured, a filler coat may be applied by adding Talc to a small quantity of mixed resin. A paste or putty-like consistency can he obtained which can then be trowelled or screeded on. This filler coat will even out the texture of the fibreglass matt which can then be sanded smooth and painted if desired. If the texture or profile is not a cosmetic consideration, a second coat of mixed resin can he applied without the talc

TRANSPORTATION

Flammable liquid Dangerous Goods Class 3.2. Pack sizes available 20Kg, 4Kg, 2Kg, 1 Kg, 500ml and 250 ml

PRECAUTIONS

Precautions are as follows:-

1. If using Norski Polyester Resin, Norski Gelcoat or Norski Flowcoat use only Norski Polyester Catalyst. *DO NOT USE ACCELERATOR*.

2. Treat all Norski Polyester Resin and Catalyst as FLAMMABLE.

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3. Keep away from naked flame.

4. Polyester Catalyst is extremely dangerous to the eyes and can cause permanent damage. If splashed into the eyes, flush immediately with clean running water for at least 10 minutes and see a doctor.

5. Wear protective glasses and rubber gloves when mixing and DO NOT rub the eyes with contaminated hands or clothing

6. Wash thoroughly after handling.

7. Keep out of reach of children at all times.

8. **DO NOT** store solvent or resin soaked rags in a confined spaces as spontaneous combustion can occur.

FIRST AID

If poisoning occurs, contact a Doctor or the POISONS INFORMATION CENTRE IF SWALLOWED DO NOT INDUCE VOMITING. DO NOT INHALE VAPOUR, USE WITH ADEQUATE VENTILATION. STORE IN A COOL PLACE.

SAFETY PRECAUTIONS: Do not use near fire or flames. Harmful or fatal if swallowed Use disposable gloves to avoid skin contamination. If resin comes into contact with skin, wash uncured resin off with soap and water. Wear safety glasses to avoid eye contamination. Mixed formulation contains Epoxy Resin and Amines. If swallowed do not induce vomiting. Give a glass of water. Contact a Doctor or the Poisons National Information Centre on 03 474 7000 (Urgent information only). Eye Contamination: Hold eyes open and flood with water for at least 15 minutes. See a Doctor immediately.

WARRANTY

Because the use of this product is beyond the control of the manufacturer, no liability or responsibility can be accepted for any loss or damage arising from its application or use. Liability for faulty material is limited to product replacement only.