

## GELCOAT - BRUSH

### **PERSONAL PROTECTION**

Please familiarise yourself with the Material Safety Data Sheets before starting. Personal Protection should be worn at all times, safety goggles, gloves, apron and overalls. If you have any queries please contact us on 028 41753738.

### **MATERIALS**

Gelcoat Kits are supplied with the following materials

1. Gelcoat
2. Catalyst / Hardener

### **WORKING AREA**

Gelcoating should be done at warm temperatures ideally around 20°C, as this ensures the resin will cure correctly. Gelcoat will not cure adequately below 15°C, and at temperatures above 30°C, they will cure too quickly.

Gelcoats are used in contact moulding (hand or spray lay-up). The gel coat, which is usually pigmented, provides a moulded-in finished surface. It is a weather and wear-resistant coating over the glass reinforcement, that helps in hiding the glass reinforcement pattern which may show through from the inherent resin shrinkage around the glass fibres.

NOTE: The gel coat will not stop fibre print-through caused by poor lamination or post cure of the laminate after demoulding.

There are specific gel coat products for either spray or brush applications.

A brush gel coat can only be applied with a brush. These gel coats are formulated to have the correct resistance to drag on the brush, release air and level correctly.

### **NON-SAGGING**

Brush grades should be applied at a covering rate of 500 to 550 g per m<sup>2</sup>. When properly applied brush grades typically do not sag. The gel coat will not entrap air (porosity) when applied as per instructions.

### **MIXING CATALYST**

All gelcoats require the addition of catalyst (hardener) to initiate the curing process. Use a safety dispenser to add 20ml of catalyst per kilo of resin. Stir thoroughly. The hardening process begins immediately, so only add catalyst to a working quantity.

Thorough mixing of catalyst into resins and gelcoat is very important. Also the correct quantities should be used for the best results. Dispensers are advised for accuracy. 1% catalyst is considered a slow mix, 2% is ideal, 3% is a fast mix.

The higher the temperature the faster the cure. As a general guide 2% addition at 20°C gives 15-20 mins pot life.

Once catalysed the gelcoat gradually cures, taking on a jelly-like consistency in about 10-20 minutes before becoming hard in about 30-40 minutes at room temperature (about 20°C). The curing process generates heat within the gelcoat. Too much catalyst or large volumes of gelcoat increases this heat. Over catalysing the gelcoat can cause the material to overheat and sometimes cause a fire.

### **APPLYING THE LAMINATE**

Mix a maximum of 2kgs at a time, enough for about 3 to 4m<sup>2</sup> of fibreglass.

Ensure that the surface is dry and clean.

Paint on a coat of catalyzed gelcoat to the surface ensuring good coverage. Gelcoats will remain tacky when cured. This is to ensure good adhesion to the following layer of glass and resin.