

GelFort 800

Multi Purpose Gel Coat

GELFORT 800 is a thixotropic, isophthalic unsaturated polyester gelcoat resin with excellent durability and water resistance, specially developed for use in tropical climates. It is designed for boat hulls which are to remain immersed for long periods in water. But equally suitable for other mouldings where good resistance to water and chemicals is important. It is also suitable for application as a flowcoat and to the reverse side of the laminate, but the addition of 2% MW solution is recommended where complete freedom from the tackiness is important.

GELFORT 800 is a resilient resin with good mechanical properties and supplied as a solution in styrene monomer and formulated to be applied by brush where GELFORT is used on laminated surface. Excellent resistance to weathering can be obtained and such laminates when fully cured are capable of meeting the surface spread of flame requirement. Catalyst and accelerator must not be mixed directly together since they can react with explosives violence.

Curing should not be carried out at ambient or mould temperatures below 15°C. GELFORT must be allowed to attain workshop temperature before formulated. For use and then be thoroughly stirred.

GEL TIME

The amount of accelerator and workshop temperature control the gel time of GELFORT formulations. The gel time can be approximately determined from the table below.

Parts by Weight	1	2
Gelcoat	100	100
Catalyst	2 -	
Accelerator	1-4	1-4

Gelcoat is a polyester resin and uses MEKP as the catalyst. Mix in MEKP at 1% to 2%. The increase or decrease of MEKP will effect the pot-life and cure time of the gelcoat. Too little catalyst will cause you to wait too long to put the second coat on and increase the chances of contamination. Too much catalyst and you will have to worry about the gelcoat pulling away from the mold due to shrinkage

To thin the gelcoat, use styrene. It is possible to use acetone to thin gelcoat, but there is a chance the gelcoat will be rubbery or soft. Styrene, on the other hand will promote cross-linking of the resin and catalyst. Do not add more than 10% styrene or acetone.



APPLICATION

GELFORT 800 is designed for application by brush. For normal mouldings the GELFORT thickness should be controlled to about 0.4mm (0.015 – 0.020 inches) as a guide 450-800gms GELFORT, when applied will give the required thickness.

For mould making a GELFORT thickness of 0.5 – 0.6mm (0.020-0.025 inches) recommended. This allows for any rubbing down which may become necessary during the life of the mould. GRP moulds should be solidly constructed so that they remain rigid during use since excessive flexing can eventually cause the GELFORT surface to craze. Where necessary GELFORT 800 may be reinforced by backing it with a glass fibre scrim cloth or by incorporating a glass fibre tissue e.g. polyester or acrylic fibre.

PIGMENTATION

GELFORT 800 may be pigmented by the addition of up to 10% pigment paste. These have been developed specifically for use in unsaturated polyester gelcoat resin. Other pigment pastes may also be suitable but customer should satisfy himself that these will give the performance required.

COVERAGE

2 sq.m / L @ 500 micron thickness

Working time between coats : 30 mins

Full cure of the total system : 6 hrs

FILLER

The addition of fillers to GELFORT 800 should be undertaken with care since their use may adversely affect this weather- resistant and water resistant properties of the cured GELFORT.

COLOUR

GELFORT 800 is available in white and gray colour

PACKING

GELFORT 800 is supplied in 20kg metal pails

STORAGE

GELFORT 800 should be stored under the cover in the dark in containers in which they are supplied. Where it is stored outside it is recommended it should be stored in a horizontal position to avoid ingress of water. Storage temperatures should not exceed 20 °C and the containers should not be opened until they are required for use.

