

# GRPX GELCOAT

## FLEXIBLE ISOPHTHALIC BRUSH GELCOAT WITH GOOD IMPACT RESISTANCE

### INTRODUCTION

GRPX Gelcoat is a pre-accelerated, brush isophthalic gelcoat available in a wide range of colours. The information contained in this leaflet also applies to pigmented versions.

### APPLICATIONS

GRPX Gelcoat is suitable for any marine, building or transport application where good flexibility and impact resistance is needed.

### FEATURES AND BENEFITS

GRPX Gelcoat is resilient and flexible with good water and impact resistance.

### APPROVALS

GRPX Gelcoat is approved by Lloyd's Register of Shipping for use in the construction of craft under their survey.

### FORMULATION

GRPX Gelcoat should be allowed to attain workshop temperature (18°C - 20°C) before use. Stir well by hand, or with a low shear mixer to avoid aeration, and then allow to stand to regain thixotropy. GRPX Gelcoat requires only the addition of catalyst to start the curing reaction. The recommended catalyst is Butanox M50 (or other equivalent catalyst), which should be added at 2% into the gelcoat. (Please consult our Technical Service Department if other catalysts are to be used). The catalyst should be thoroughly incorporated into the gelcoat, with a low shear mechanical stirrer where possible.

### POT LIFE

TEMPERATURE	POT LIFE IN MINUTES
15°C	28
20°C	17
25°C	10

The gelcoat, mould and workshop should all be at, or above, 15°C before curing is carried out.

### APPLICATION

For normal moulding, the application of GRPX Gelcoat should be controlled to 0.4 - 0.5mm (0.015 - 0.020 inch) wet film thickness. As a guide, approximately 450-600g/m<sup>2</sup> of gelcoat mixture (depending on pigment) will give the required thickness when evenly applied.

### ADDITIVES

GRPX Gelcoat is supplied in a wide range of colours. This eliminates the potential for mixing errors with small quantities of pigment paste. The addition of fillers or pigments can adversely affect the weather and water resistance of the cured gelcoat.

## RECOMMENDED TESTING

It is recommended that customers test all pigmented gelcoats before use under their own conditions of application to ensure the required surface finish is achieved.

## TYPICAL PROPERTIES

The following tables give typical properties of GRPX Gelcoat when tested in accordance with appropriate SB, BS, EN or BS, EN, ISO test methods.

PROPERTY	LIQUID GELCOAT	
Appearance	Mauvish, cloudy	
Viscosity @ 25°C	thixotropic	
Specific gravity @ 25°C	1.15	
Acid Value	mg KOH/g	19
Stability @ 20°C	months	3
Geltime @ 25°C using 2% Butanox M50 (or other equivalent catalyst)	minutes	10

PROPERTY	FULLY CURED* GELCOAT (UNFILLED CASTING)	
Barcol Hardness (Model GYZJ 934-1)	33	
Water Absorption 24hrs @ 23°C mg	26	
Deflection Temperature under load † (1.80 MPa)	°C	55
Elongation at Break	%	4.9
Tensile Strength	MPa	66
Tensile Modulus	MPa	3260

\* Curing schedule - 24hrs @ 20°C, 3hrs @ 80°C

† Curing schedule - 24hrs @ 20°C, 5hrs @ 80°C, 3hrs @120°C

## POST-CURING

Satisfactory mouldings for many applications can be made with GRPX Gelcoat by curing at workshop temperature (20°C). However, for optimum properties, mouldings must be post-cured before being put into service. The moulding should be allowed to cure for 24 hours at 20°C, and then be oven-cured for 3 hours at 80°C.

## STORAGE

GRPX Gelcoat should be stored in its original container and out of direct sunlight. It is recommended that the storage temperature should be less than 20°C where practical, but should not exceed 30°C. Ideally, containers should only be opened immediately prior to use.

## PACKAGING

GRPX Gelcoat is supplied in 25kg and 225kg containers.

## HEALTH AND SAFETY

Please see separate Material Safety Data Sheet.