

# CRYSTIC GELCOAT 64PA

## Low Viscosity Isophthalic Roller or Brush Gelcoat

### Introduction

Crystic Gelcoat 64PA is a pre-accelerated, isophthalic gelcoat. The formulation is designed to be applied by either brush or roller and is available in a wide range of colours. The information contained in this leaflet also applies to pigmented versions.

### Applications

Crystic Gelcoat 64PA is designed for use in the marine, building and transport industries. It is also suitable for general moulding requirements.

### Features and Benefits

Crystic Gelcoat 64PA has excellent water and weather resistance.

### Approvals

Crystic Gelcoat 64PA is approved by Lloyd's Register of Shipping and det Norske Veritas for use in the construction of craft under their survey or rules.

### Formulation

Crystic Gelcoat 64PA 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. Crystic Gelcoat 64PA 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.

### Application

For normal moulding, the application of Crystic Gelcoat 64PA should be controlled to 0.4-0.5 mm (0.015-0.020 inch) wet film thickness. As a guide, approximately 450-600 g/m<sup>2</sup> of gelcoat mixture (depending on pigment) will give the required thickness when evenly applied. If applied by roller, the application should be finished with a brush to avoid any issues with porosity.

### Additives

Crystic Gelcoat 64PA 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 water and weather resistance of the cured gelcoat. Crystic Gelcoat 64PA can be used as a topcoat provided that 2% Crystic Solution MW is added to overcome the normal tackiness.

### 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 Crystic Gelcoat 64PA when tested in accordance with the relevant BS EN ISO test methods.

Property		Liquid Gelcoat
Appearance		mauvis, cloudy thixotropic liquid
Viscosity @ 25°C		thixotropic
Specific Gravity @ 25°C		1.10
Volatile Content	%	40
Geltime at 25°C 2% Butanox M50 (or other equivalent catalyst)	minutes	8
Stability @ 20°C	months	3

Property		Fully cured* (unfilled casting)
Barcol Hardness (Model GYZJ 934-1)		44
Water Absorption 24hrs @ 23°C	mg	17
Deflection Temperature under load (1.80MPa)†	°C	65
Elongation at Break	%	3.1
Tensile Strength	MPa	61
Tensile Modulus	MPa	3100

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

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

## Post-Curing

Satisfactory laminates for many applications can be made with Crystic Gelcoat 64PA by curing at workshop temperature (20°C). However, for optimum properties, laminates should 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 although a longer period at a lower temperature will give almost the same result

## Storage

Crystic Gelcoat 64PA 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, and should not exceed 30°C. Ideally, containers should be opened only immediately prior to use.

## Packaging

Crystic Gelcoat 64PA is supplied in 25kg and 225kg containers.

## Health and Safety

See separate Material Safety Data Sheet.