CRYSTIC® GELCOAT 25PA

Orthophthalic Brush Gelcoat

Introduction
Crystic Gelcoat 25PA is a pre-accelerated, flexible, orthophthalic gelcoat. It has been formulated for brush application and is available in a restricted range of colours. The information contained in this leaflet also applies to pigmented versions.

Applications
Crystic Gelcoat 25PA is designed for use in non critical parts in building, land transport and general industrial applications.

Features and Benefits
Crystic Gelcoat 25PA is suitable for use on external parts but has limited gloss and gloss retention.

Formulation
Crystic Gelcoat 25PA should be allowed to attain workshop temperature (18º - 20ºC) 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 25PA requires only the addition of a 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 for advice, 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 Using 2% Butanox M50 (or Other Equivalent Catalyst)
15ºC	25
20ºC	16
25ºC	10

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

Application
For normal moulding, the application of Crystic Gelcoat 25PA should be controlled to 0.4 - 0.5mm (0.015 – 0.020 inch) wet film thickness. As a guide, approximately 450 - 600g/m² of gelcoat mixture (depending on pigment) will give the required thickness when evenly applied.

Additives
Crystic Gelcoat 25PA is supplied in a restricted 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 resistance and flexibility 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.

Physical Data - Uncured
The following tables give typical properties of Crystic Gelcoat 25PA when tested in accordance with appropriate SB, BS, EN or BS EN ISO test methods.

Property	Unit	Liquid Gelcoat
Appearance		Mauvish, Cloudy
Viscosity at 25ºC		Thixotropic
Specific Gravity at 25ºC		1.1
Stability at 20ºC	Months	3
Geltime at 25ºC Using 2% Butanox M50 (or Other Equivalent Catalyst)	Minutes	10

Physical Data - Uncured

Property	Unit	Fully Cured *Gelcoat (Unfilled Casting)
Barcol Hardness (Model GYZJ 934-1)		33
Water Absorption 24 hrs at 23ºC	mg	28
Deflection Temperature Under Load† (1.80 MPa)	ºC	36
Elongation at Break	%	14
Elongation at Peak Stress	%	5.5
Tensile Strength	MPa	32
Tensile Modulus	MPa	1600

* Curing Schedule - 24 hrs at 20ºC, 3 hrs at 80ºC.
† Curing Schedule - 24 hrs at 20ºC, 5 hrs at 80ºC, 3 hrs at 120ºC.

Post-Curing
Satisfactory laminates for many applications can be made using Crystic Gelcoat 25PA by curing at workshop temperature (20°C). For optimum properties, however, laminates 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
Crystic Gelcoat 25PA should be stored in its original container and out of direct sunlight. It is recommended that the storage temperature should be less than 20ºC where practical, but should not exceed 30ºC. Ideally, containers should be opened only immediately prior to use.

Packaging
Crystic Gelcoat 25PA is supplied in 25Kg and 225Kg containers.

Health and Safety
Please see separate Material Safety Data Sheet.

Version 3 : February 2013

SCOTT BADER COMPANY LIMITED
Wollaston, Wellingborough, Northamptonshire, NN29 7RL
Telephone: +44 (0) 1933 663100
Facsimile: +44 (0) 1933 666623
www.scottbader.com