

Crystic Topcoat 47PA

Matt Finish Topcoat for Brush Application

Introduction

Crystic Topcoat 47PA is a pre-accelerated, filled, orthophthalic topcoat. 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 these pigmented versions.

Applications

Crystic Topcoat 47PA is designed for interior use where a smooth finish is required on the reverse side of a laminate. It is not suitable for exterior use.

Features and benefits

Crystic Topcoat 47PA has low styrene emission. It is not air inhibited, and produces a matt finish.

Formulation

Crystic Topcoat 47PA 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 Topcoat 47PA 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 topcoat. (Please consult our Technical Service Department if other catalysts are to be used). The catalyst should be thoroughly incorporated into the topcoat, with a low shear mechanical stirrer where possible.

Pot Life

Temperature	Pot Life in Minutes
15°C	21
20°C	15
25°C	10

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

Application

For normal requirements, the application of Crystic Topcoat 47PA should be controlled to 0.4 - 0.5mm (0.015 - 0.020 inch) wet film thickness. As a guide, approximately 700-900g/m² of topcoat mixture (depending on pigment) will give the required thickness when evenly applied.

Additives

Crystic Topcoat 47PA 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 properties of the cured topcoat.

Recommended Testing

It is recommended that before using Crystic pigmented gelcoats, customers test all colours under their own conditions of application to ensure they attain the quality surface finish they require.

Typical Properties

The following tables give typical properties of Crystic Topcoat 47PA when tested in accordance with SB, BS, or BS EN ISO test methods.

Property	Unit	Liquid
Appearance		Filled, opaque
Viscosity at 25°C		Thixotropic
Specific Gravity at 25°C		1.7
Volatile Content	%	18
Stability at 20°C	months	3
Gel time at 25°C using 2% Butanox M50 (or other equivalent catalyst)	minutes	10

Property	Unit	Fully cured* flowcoat (unfilled casting)
Barcol Hardness (Model GYZJ 934-1)		58
Water Absorption 24hrs at 23°C	mg	13
Deflection Temperature under load† (1.80 MPa)	°C	73
Elongation at Break	%	0.4
Tensile Strength	MPa	35
Tensile Modulus	MPa	7769

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

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

Post-Curing

Curing at workshop temperature (20°C) will be satisfactory for many applications. However, for optimum properties, 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 Topcoat 47PA 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

Crystic Topcoat 47PA is supplied in 25kg and 225kg containers.

Health and safety

Please see separate Material Safety Data Sheet.

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SCOTT BADER COMPANY LIMITED

Wollaston, Wellingborough, Northamptonshire, NN29 7RL

Telephone: +44 (0) 1933 663100

Facsimile: +44 (0) 1933 666623

www.scottbader.com