

CRYSTIC[®] TOPCOAT 65PAX

Topcoat for Brush Application

Introduction

Crystic Topcoat 65PAX is a pre-accelerated, isophthalic topcoat. It has been formulated for brush application and is available in a restricted range of colours. The information contained in this technical datasheet also applies to these pigmented versions.

Applications

Crystic Topcoat 65PAX is designed for use where a smooth finish is required on the reverse side of a laminate.

Features and Benefits

Crystic Topcoat 65PAX has low styrene emission. It is not air inhibited, and produces a matt finish.

Formulation

Crystic Topcoat 65PAX 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 65PAX 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 | 24 |
| 20°C | 15 |
| 25°C | 9 |

Curing should not be carried out at temperatures below 15°C. The topcoat, moulding and workshop should all be at, or above this temperature.

Application

For normal requirements, the application of Crystic Topcoat 65PAX should be controlled to 0.4 - 0.5mm (0.015 - 0.020 inches) wet film thickness. As a guide, approximately 450-600g/m² of Topcoat mixture (depending on pigment) will give the required thickness when evenly applied.

Additives

Crystic Topcoat 65PAX 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.

Physical Data – Uncured

The following tables give typical properties of Crystic Topcoat 65PAX when tested in accordance with SB, BS, or BS EN ISO test methods.

| Property | Unit | Liquid Topcoat |
|---|---------|----------------|
| Appearance | | Filled, Opaque |
| Viscosity at 25°C | | Thixotropic |
| Specific Gravity at 25°C | | 1.1 |
| Volatile Content | % | 34 |
| Stability at 20°C | Months | 3 |
| Geltime at 25°C Using 2% Butanox M50 (or Other Equivalent Catalyst) | Minutes | 9 |

Physical Data – Cured

| Property | Unit | Fully Cured *Topcoat (Unfilled Casting) |
|---|------|---|
| Barcol Hardness (Model GYZJ 934-1) | | 42 |
| Water Absorption 24 Hrs at 23°C | mg | 18 |
| Deflection Temperature Under Load† (1.80 MPa) | °C | 75 |
| Elongation at Break | % | 3.0 |
| Tensile Strength | MPa | 75 |
| Tensile Modulus | MPa | 3500 |

* 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 65PAX 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 65PAX is supplied in 25Kg and 225Kg containers.

Health and Safety

Please see separate Material Safety Data Sheet.

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