

CRYSTIC[®] GELCOAT 76PA FR

Low Styrene Content Gelcoat with very Low Flammability

Introduction

Crystic Gelcoat 76PA FR is a low styrene content, pre-accelerated, fire retardant gelcoat. It has been formulated for brush application, but a spray version, Crystic Gelcoat 76PA FR (Spray), is also available.

Crystic Gelcoat 76PA FR is available in a restricted range of colours. The information contained in this leaflet also applies to these pigmented versions.

Applications

Crystic Gelcoat 76PA FR can be used for building applications, vehicle bodies and general industrial work.

Features and Benefits

Crystic Gelcoat 76PA FR is formulated to have lower styrene content and has good weathering properties, and very low flammability.

Approvals

Properly manufactured, fully cured laminates using Crystic Gelcoat 76PA FR and Crystic 347E PA / Crystic 349E PA achieves a Class 0 / 1 rating to BS476 Part 6 / 7.

With the laminating resin Crystic 329E PA, a Class 2 rating can be achieved to BS476 Part 7.

Formulation

Crystic Gelcoat 76PA FR 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 76PA FR requires only the addition of catalyst to start the curing reaction. The recommended catalyst is Catalyst M (or ButanoxM50), 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 76PA FR should be controlled to 0.55 - 0.8mm wet film thickness. As a guide, approximately 750g/m² of gelcoat mixture (depending on pigment) will give the required thickness when evenly applied.

Additives

Crystic Gelcoat 76PA FR 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, fire and water resistance of the cured gelcoat.

Physical Data - Uncured

The following tables give typical properties of Crystic Gelcoat 76PA FR when tested in accordance with SB, BS, BS EN or BS EN ISO test methods.

Property	Unit	Spray	Brush
Viscosity at 25°C, SP5 / 20 rpm	cPs	-	8000
Viscosity at 25°C, SP4 / 5 rpm	cPs	15000	-
Viscosity at 25°C, C & P	Poise	3	9
Specific Gravity at 25°C		1.4	1.4
Stability at 20°C	Months	3	3
Geltime at 25°C Using 2% Butanox M50 (or Equivalent Catalyst)	Minutes	20	

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

** Curing Schedule - 24 hrs at 20°C, 5 hrs at 80°C, 3 hrs at 120°C

Post-Curing

Satisfactory laminates for many applications can be made with Crystic Gelcoat 76PA FR by curing at workshop temperature (20°C). However, for optimum fire retardant 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 Gelcoat 76PA FR should be stored in the dark in suitable, closed containers. 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 Gelcoat 76PA FR is supplied in 25Kg, 225Kg and 250Kg containers.

Health and Safety

Please see separate Material Safety Data Sheet.

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