CRYSTIC® FIREGUARD 73PA

Fire Retardant Brush Gelcoat

Introduction
Crystic Fireguard 73PA is a pre-accelerated filled brush gelcoat. It is available in a wide range of colours and the information contained in this technical data sheet also applies to these pigmented versions.

Applications
Crystic Fireguard 73PA can be used both internally and externally for building, transport and general industial work.

Features and Benefits
Crystic Fireguard 73PA has very low flammability.

Formulation
Crystic Fireguard 73PA should be allowed to attain workshop temperature (18°C-20°C) before use. Stir well by hand or with a low shear stirrer to avoid aeration and then allow to stand to regain thixotropy. Crystic Fireguard 73PA 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 Fireguard 73PA should be controlled to 0.4 - 0.5mm (0.015 - 0.020 inch) wet film thickness. As a guide, approximately 550-750g/m² of gelcoat mixture (depending on pigment) will give the required thickness when evenly applied.

Additives
The addition of fillers or pigments to Crystic Fireguard 73PA is likely to affect the weathering and cure of this material and is not recommended.

Recommended Testing
It is recommended that customers test Crystic Fireguard 73PA 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 Fireguard 73PA when tested in accordance with SB, BS EN or BS EN ISO test methods.

Property	Unit	Liquid Gelcoat
Appearance		Opaque, Coloured
Viscosity at 25 ºC		Thixotropic
Specific Gravity at 25 °C		1.40
Stability at 20°C	Months	3
Gel time at 25ºC Using 4% Accelerator E and 2% Butanox M50 (or Other Equivalent Catalyst)	Minutes	6 - 10

Physical Data - Uncured

Property	Unit	Fully Cured* Gelcoat (Unfilled Casting)
Barcol Hardness (Model GYZJ 934-1)		52
Deflection Temperature Under Load† (1.80 MPa)	ºC	78
Elongation at Break	%	1.7
Tensile Strength	MPa	57
Tensile Modulus	MPa	5400

*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
For many applications, Crystic Fireguard 73PA will perform adequately when cured at workshop temperature (20°C). However, for optimum properties it should be allowed to cure for 24 hours at 20°C, and then be oven-cured for 3 hours at 80°C.

Storage
Crystic Fireguard 73PA 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 Fireguard 73PA is supplied in 25Kg and 225Kg containers.

Health and Safety
Please see separate Material Safety Data Sheet.

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