

CRYSTIC[®] 2.3700PA

Introduction

Crystic 2.3700PA is a low styrene emission, pre-accelerated, orthophthalic polyester resin, which rapidly wets out reinforcements. It has been specifically designed for non-critical and industrial applications. It is not suitable for boat construction, chemical resistance or mouldings in contact with food products. Crystic 2.3700PA is available in several colours and the information contained in this leaflet also applies to these pigmented versions. When used in conjunction with Crystic Gelcoat 73PA it achieves a BS 476 part 7 class 2 fire rating.

Formulation

Crystic 2.3700PA 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 2.3700PA requires only the addition of catalyst to start the curing reaction. The recommended catalyst is Catalyst M (or Butanox M50), which should be added at 1% into the resin. (Please consult our Technical Service Department if other catalysts are to be used). The catalyst should be thoroughly incorporated into the resin with a low shear mechanical stirrer where possible.

Pot Life

Temperature	Pot Life In Minutes
15°C	42
20°C	22
25°C	17

The resin, mould and workshop should be at, or above, 15°C before curing is carried out.

Application

Crystic 2.3700PA is designed for hand laminating and would normally be used with chopped strand mat. Higher specification reinforcements are not recommended.

Additives

The addition of filler or pigments can adversely affect the hardening of the resin. Users should evaluate the effect of any potential additives before use.

Post Curing

Satisfactory laminates for most non-critical applications can be made with Crystic 2.3700PA by curing at workshop temperature (20°C).

Typical Properties

The following tables give the minimum expected properties of Crystic 2.3700PA when tested in accordance with BS 2782.

Property		Liquid Resin
Appearance		Greenish blue
Viscosity at 25°C		Thixotropic
Specific Gravity at 25°C		1.12
Volatile Content	%	43
Stability at 20°C	months	3
Geltime at 25°C using 1% Catalyst M (or Butanox M50)	minutes	17
Property		Fully Cured* Resin (unfilled casting)
Barcol Hardness (Model GYZJ 934-1)		42
Deflection Temperature under load † (1.80 Mpa)	°C	67
Water Absorption 24 hours at 23°C	mg	15
Tensile Strength	MPa	50
Tensile Modulus	MPa	3800
Elongation at Break	%	1.5

* 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

Property		CSM** Laminate
Tensile Strength	MPa	98
Tensile Modulus	MPa	7600
Flexural Strength	MPa	190
Flexural Modulus	MPa	7400
Elongation at Break	%	1.7

**Made with 4 layers 450g/m² PB CSM
Curing Schedule - 24 hrs at 20°C, 16hrs at 40°C

Storage

Crystic 2.3700PA 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 be opened only immediately prior to use. Where they have to be stored outside, it is recommended that they are kept in a horizontal position to avoid the possible ingress of water.

Packaging

Crystic 2.3700PA is supplied in 25kg and 200kg containers.

Health & Safety

Please see separate Material Safety Data Sheet.

Version 2 : February 2013

All information on this data sheet is based on laboratory testing and is not intended for design purposes. Scott Bader makes no representations or warranties of any kind concerning this data. Due to variance of storage, handling and application of these materials, Scott Bader cannot accept liability for results obtained. The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication.

SCOTT BADER COMPANY LIMITED

Wollaston, Wellingborough, Northamptonshire, NN29 7RL

Telephone: +44 (0) 1933 663100

Facsimile: +44 (0) 1933 666623

www.scottbader.com