



Introduction

Crystic® VE 679-03PA is a pre-accelerated, DCPD modified, vinyl ester resin for infusion.

Features and benefits

Crystic® VE 679-03PA has excellent blister resistance and significantly reduces the occurrence of print through, to produce durable mouldings with an enhanced surface finish. Crystic® VE 679-03PA produced at Scott Bader's Wollaston UK facility, is approved by Lloyd's Register of Shipping for use in the construction of craft under their survey.

Applications

Crystic® VE 679-03PA is recommended for use as an infusion resin with a wide range of gel times with various catalysts.

Physical data

The following tables give typical properties of Crystic® VE 679-03PA when tested in accordance with Scott Bader, BS EN or BS EN ISO test methods.

Physical data - uncured

Property	Unit	Liquid Resin
Appearance		Red/Brown
Viscosity at 25°C, 4500sec-1	Poise	1.9
Specific Gravity at 25°C		1.065

Physical data - cured

Property	Unit	Fully Cured Resin†	
Deflection temperature under load (1.80 MPa)	°C	92	
Property	Unit	Fully Cured* Resin	Fully Cured** Resin
Barcol Hardness		31	37
Tensile Strength	MPa	62	68
Tensile Modulus	GPa	3.2	3.5
Elongation at Break	%	2.7	2.2

*Curing Schedule - 24 hours at 20°C, 16 hours at 40°C

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

†Curing Schedule - 24 hours at 20°C, 5 hours at 80°C, 3 hours at 120°C



Recommended testing

It is recommended that customers test Crystic® VE 679-03PA before use under their own conditions of application to ensure the required surface finish is achieved.

Formulation

Crystic VE 679-03PA must be thoroughly stirred and allowed to attain workshop temperature (18 °C – 20 °C) before use. It needs only the addition of a catalyst to start the curing reaction. The recommended catalyst is Trigonox 249, which should be added at 2 % into the resin.

Pot life

The geltime of Crystic VE 679- 03PA can be approximately determined from the table below.

Temperature	Pot Life using 2% Trigonox 249
15°C	195 minutes
20°C	120 minutes
25°C	80 minutes

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

Additives

Crystic® VE 679-03PA is supplied ready for use. The addition of any additives may adversely affect the performance of this product and users should consult Scott Bader's Technical Support Department before making any such additions.

Storage

Crystic® VE 679-03PA should be stored in its original container and out of direct sunlight. It is recommended that the storage temperature be less than 20°C where practical, but should not exceed 30°C. Ideally, containers should be opened only immediately prior to use. Shelf life from date of manufacture when stored in accordance with these recommendations is 6 months.

Packaging

Crystic® VE 679-03PA can be supplied in 25kg kegs, 200kg drums and 1100kg IBCs

Health and Safety

Please see separate Material Safety Data Sheet.

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