



# Crestamould® VE 690PA

# Modified vinyl ester resin for tooling skin coats and manufactured parts

#### **Product Overview**

#### Introduction

Crestamould® VE 690PA is a pre-accelerated, thixotropic, modified vinyl ester resin for tooling applications and manufactured parts.

#### **Applications**

Crestamould® VE 690PA was developed for use as a skin coat in tooling and marine applications where surface finish is critical.

#### Features and Benefits

Crestamould® VE 690PA has excellent blister resistance and significantly reduces the occurrence of print through, to produce durable mouldings with an enhanced surface finish.

#### **Approvals**

Crestamould® VE 690PA is approved by Lloyd's Register of Shipping for use in the construction of craft under their survey.

#### **Product Characteristics**

#### Formulation

Crestamould® VE 690PA 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. Butanox M50, Butanox LA-IN and Trigonox 249VR catalyst can be used, which should be added into the resin. The geltime of Crestamould® VE 690PA can be approximately determined from the table on page 2.

#### Additives

The addition of pigment, fillers or other additives may adversely affect the resin properties. Users should consult Scott Bader's Technical Service Department before making any such additions.

## **Typical Properties**

The following tables give typical properties of Crestamould® VE 690PA when tested in accordance with the appropriate BS or BS EN ISO test method.

Liquid Properties	Unit	Liquid Resin	
Colour		Red / Brown	
Viscosity at 25°C 37.35sec <sup>-1</sup>	Poise	5.0	
Viscosity at 25°C 4500sec-1	Poise	2.3	
Specific Gravity @ 25°C	gcm <sup>-3</sup>	1.065	
Stability in the dark at 25°C	Months	6	
Geltime at 20°C using 2% Butanox M50	Minutes	15	
Geltime at 20°C using 2% LA-IN	Minutes	24	
Geltime at 20°C using 2% Triganox 249VR	Minutes	21	
Mechanical Properties	11.26	Fully Cured Resin ( unfilled casting )	
Weenaniear roperties	Unit		
Mechanical Floperacs	Unit		
Barcol Hardness (GYZJ 934 - 1)	Unit	( unfilled	casting )
	°C	( unfilled *	casting )  **
Barcol Hardness (GYZJ 934 - 1)		( unfilled *	casting )  **  35
Barcol Hardness (GYZJ 934 - 1)  Deflection Temperature under load (1.80 MPa)	°C	( unfilled * 23 60	casting )  **  35  94†
Barcol Hardness (GYZJ 934 - 1)  Deflection Temperature under load (1.80 MPa)  Water Absorption 24hrs @23°C	°C mg	( unfilled * 23 60 10	casting)  **  35  94†  15
Barcol Hardness (GYZJ 934 - 1)  Deflection Temperature under load (1.80 MPa)  Water Absorption 24hrs @23°C  Tensile Strength	°C mg MPa	( unfilled * 23 60 10 60	casting)  **  35  94†  15  52

<sup>\*</sup> Curing Schedule - 24hrs @ 20°C, 16hrs @ 40°C.

#### Additional Information

#### Storage

Crestamould® VE 690PA 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.

#### Packaging

Crestamould® VE 690PA is supplied in 25kg and 200kg steel containers.

## Health & Safety

Please see separate Materials Safety Data Sheet.



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<sup>\*\*</sup> Curing Schedule - 24hrs @ 20°C, 3hrs @ 80°C.

<sup>&</sup>lt;sup>†</sup> Curing Schedule - 24hrs @ 20°C, 5 hrs @ 80°C, 3 hrs @ 120°C.