

# 630PA



# **Technical Data Sheet**

#### **Product Overview**

Crestafix 630PA is pre-accelerated vinylester based high performance bonding paste. It is a non-sagging, filled compound with high strength, specifically designed for the assembly and bonding of GRP mouldings. Such applications include panels, inserts, internal frames, ribs, internal core materials and composite constructions. Crestafix 630PA provides high shear-strength bonded joints without the need for mechanical fixings.

## **Features and Benefits**

Highly thixotropic High strength Vinyl ester base

- No sagging on vertical surfaces
- Replaces mechanical fastners
- Excellent adhesion and good elongation at break

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Working Time¹ 50 - 70 Minutes

Fixture Time² 180 - 240 Minutes

Gap Filling 1 - 25 mm (0.04 - 1.0 inch)

Colour Change Deep Purple to Brown

Time to Peak Exotherm 110 minutes

Peak Exotherm 90°C - 130°C

# **Mechanical Properties**

 GRP Lap Shear Strength³
 6.5 - 7.5 MPa

 Tensile Strength⁴
 50 - 60 MPa (7250 - 8700 psi)

 Tensile Modulus⁴
 3.7 - 4.2 GPa (478,000 - 530,000 psi)

 Tensile Elongation⁴
 2.5 - 3.5 %

 Hardness
 80 - 90 Shore D

 HDT
 60°C (140°F)

# **Liquid Properties**

 Viscosity<sup>5</sup> 6.0 s-1
 90,000 - 130,000 cP

 Viscosity<sup>5</sup> 0.6 s-1
 950,000 - 1,300,000 cP

 Specific Gravity
 1.05 - 1.15 g/cc

 Colour
 Deep Purple

 Shelf Life<sup>6</sup>
 12 Months

#### **Recommended Substrates**

Crestafix 630PA is suitable for use on GRP laminates, but also can be used on timber and plasterboard. However it is recommended that trials are carried out to ensure adequate bond strengths are obtained. Please contact Scott Bader Technical Services for information on other substrates and advice.

## **Surface Preparation**

The surfaces to be bonded should be clean, dry and free from any contamination. It may be necessary to mechanically abrade the surfaces to be bonded in order to obtain the bond strength required. Please contact Scott Bader Technical Services for information on other substrates and advice.

# **Application**

Crestafix 630PA is supplied pre-accelerated, requiring only the addition of catalyst to start the curing reaction. The recommended catalyst is Triganox 239 (or other equivalent catalyst e.g. Butanox LPT-IN), which should be added at 2% v/w into the bonding paste. The catalyst should be thoroughly incorporated into the material with a low shear mechanical stirrer where possible, taking care to keep air entrapment to a minimum. The bonding paste, moulding and workshop should all be at, or above,  $15^{\circ}$ C ( $59^{\circ}$ F) before curing is carried out. Recommended temperature range for application is between  $18^{\circ}$ C and  $25^{\circ}$ C ( $64^{\circ}$ F and  $77^{\circ}$ F). Each surface should be coated with the catalysed bonding paste and held together until the adhesive has hardened.

The use of additional pigments or fillers is not recommended as they can affect the performance of the adhesive.

For industrial/commercial use only. The user must determine the suitability of a selected adhesive for a given substrate and application. Contact your local Scott Bader representative for questions or assistance with the selection of adhesives for your use. This product is intended for use by skilled individuals at their own risk. Recommendations contained herein are based on information we believe to be reliable. The properties and strength values have been obtained under controlled conditions at the Scott Bader laboratory.

## Coverage

As a rough guide, 3.3Kg (7.2lbs) of bonding paste will cover one square metre (10.76 ft²) to a depth of approximately 3mm (0.1 inch).

## Storage & Shelf life

Crestafix 630PA should be stored between 2°C and 23°C (36°F and 77°F) in the original unopened container in a dry, well ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents.

The shelflife is defined from date of manufacture when stored as recommended. The expiry date is indicated on product labels.

### **Packaging**

Crestafix 630PA is supplied in 25Kg (55lbs) and 225Kg (496lbs) containers.

## **Health and Safety**

See separate Material Safety Data Sheet.

### **Notes**

1. Working Time measured with 100g mass of adhesive with 2% Triganox 239 at 25°C (77°F).

2. Fixture time defined using an ISO-4587 GRP lap shear sample, 3 mm bondline thickness with  $23^{\circ}\text{C}$  ( $73^{\circ}\text{F}$ ) ambient temperature achieving >1.4MPa.

3. As tested to BS ISO 4587

4. As tested to BS EN ISO 527-2.

5. Measuring using Rotovisco 1 (RV1) at 25°C (77°F) 35mm PF

6. The shelf life is defined from date of manufacture if stored as recommended.



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#### **Scott Bader UK**

Wollaston, Wellingborough, Northants NN29 7RL, UK

Tel: +44 (0)1933 666738

Email: enquiries@scottbader.com

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