

# **Advantage 10**

**Technical Data Sheet** 



#### **Product Overview**

Crestomer® Advantage 10 is a structural adhesive that bonds a wide range of substrates with minimal surface preparation and lower odour than competitive materials. It has a white colour, with a gel time of 10 minutes and bonded parts are workable in 1.2 hours. Crestomer® Advantage 10 is based on Scott Bader's innovative urethane acrylate technology and exhibits exceptional impact strength and toughness. Its excellent adhesion and gap filling capabilities offer great flexibility in design with significant time and cost savings.

#### **Features and Benefits**

Urethane acrylate base

Excellent retention of toughness

Excellent fatigue and impact resistance

Non sag



Excellent adhesion and high elongation at break



Highly thixotropic



Perfect gap filling solution



Application on vertical surfaces

Application properties	
Working time <sup>1</sup>	10 minutes
Fixture time <sup>2</sup>	1.2 hours
Gap filling	1 – 15 mm/ 0.04 – 0.6 inch
Colour change (over cure)	None
Recommended application temperature	18°C - 25°C / 64°F - 77°F

Mechanical properties	
Tensile strength	22 - 25 MPa
Tensile modulus	400 - 600 MPa
Tensile elongation	100 - 120%
Hardness	59 Shore D
Water Absorption	0.50%
Approvals	Lloyds



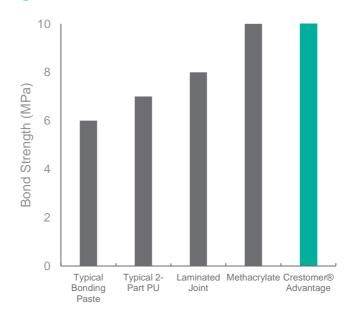
Liquid properties	
Product	Advantage 10
Viscosity <sup>3</sup>	280,000 - 350,000 cP
Specific gravity	1.15
Volatile Content	40 - 45%
Mixed ratio <sup>4</sup> (by volume)	10:1
Appearance	White paste
Shelf life <sup>5</sup>	12 months

# **Recommended Substrates**

	Recommended substrates (Lap shear / Cleavage strength MPa)
Metals	Stainless Steel Aluminium
Wood	Marine ply Balsa
Composites	GRP/FRP Polyester resin DCPD Vinyl ester Epoxy

Please contact Scott Bader Technical Support for information and advice on other substrates

# **FRP to FRP Bond Strength**





### **Surface preparation**

Crestomer® Advantage 10 has excellent adhesion to FRP material provided that the surface has been maintained free of dust and grease. This can be guaranteed by the use of propietary stripable cloths such as peel ply (without lubricant contaminates). If the laminate surface is more than three days old it is recommended that they are lightly abraded and wiped with acetone or styrene on a lint-free, clean cloth prior to bonding.

## **Application**

Crestomer® Advantage 10 is supplied ready to use in pre-packed 380ml co-axial cartridges with no hand mixing required. Crestomer® Advantage 10 is supplied pre-accelerated and contains advantage catalyst within the cartridge. The mixer indicator system imparts a neutral, opaque white colour and this blends well in cosmetically sensitive applications.

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 are obtained under controlled conditions at the Scott Bader laboratory.

### Storage and shelf life

Crestomer® Advantage 10 should be stored internally in its original container. It is recommended that the storage temperature should be between 15°C and 20°C/59°F and 68°F. Cartridges should be opened only immediately prior to use. Products should never be frozen.

The shelf life for Crestomer products is defined from date of manufacture if stored as recommended. The expiry date is indicated on the product labels.

### **Packaging**

Crestomer® Advantage 10 is supplied in 380ml co-axial cartridges.

#### **Health and Safety**

See separate Material Safety Data Sheet

- 1. Gel time measured with 100g mass of adhesive at 25°C/ 77°F.
- 2. Time taken at 23°C / 73°F (ambient temperature) to achieve 1.4MPa strength in lap-shear tests according to BS ISO.
  - 3. Measured using Brookfield Viscometer at 25°C / 77°F.
  - 4. Mix ratio based on cartridge dispensing as supplied
  - 5. Shelf life defined from date of manufacture when stored as recommended.

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