SCOTT BADER ADHESIVES

CRESTOMER 1150PA
(PROVISIONAL DATASHEET)

Structural Adhesive

Product Overview

Crestomer 1150PA is a two part pre-accelerated, highly thixotropic structural adhesive based on unsaturated urethane-acrylate in styrene monomer. It is used in many structural composite applications and has excellent adhesion to FRP laminates, core materials, wood and some metals. It can be used for bonding diesel tanks, contour joints in FRP components, to build up damaged areas and to bond "green" FRP.

Features and Benefits

Urethane acrylate base	Excellent adhesion and high elongation at break
Highly thixotropic	No sagging on vertical surfaces
Excellent retention of toughness	Excellent fatigue and impact resistance
Controlled cure and exotherm behaviour	Improved aesthetics and better surface finish
Short fixture time	Increased productivity and reduced cycle times

Characteristics Using 2% Butanox M50 Catalyst

Characteristics	Typical Value
Working Time/Geltime[1]	50 Minutes
Fixture Time[2]	5 Hours
Colour Change (Over Cure)	None
Gap Filling	1-15 mm

1. Geltime measured with 100g mass of adhesive at 25°C.
2. Time taken at 23°C (ambient temperature) to achieve 1.4MPa strength in lap-shear tests according to BS ISO 4587.

Liquid Properties

Property	Typical Value
Viscosity	Thixotropic gel
Specific Gravity	1.0 – 1.1
Mix Ratio[3]	50:1
Colour/Appearance	Purple/Brown Gel
Stability at 20°C[4]	12 Months

3. Mix ratio based on volume and weight for both machine dispensing and hand mixing.
4. Stability defined from date of manufacture when left un-opened in the original containers and stored out of direct sunlight.

Typical Material Properties

Property	Typical Value	Unit	Test Method
Maximum Tensile Strength	23 - 26	MPa	BS EN ISO 527-2
Tensile Modulus	800 - 1150	MPa	BS EN ISO 527-2
Elongation at Break	100 - 110	%	BS EN ISO 527-2

Surface Preparation
Crestomer 1150PA has excellent adhesion to FRP material provided that the surface has been maintained free of dust and grease. This can be ensured by the use of proprietary strippable cloths such as peel ply (without lubricant contaminates). If the laminate surfaces are more than 3 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.

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

Application
Crestomer 1150PA is supplied pre-accelerated. The required hardener is Butanox M50 (or other equivalent MEKP catalyst). The catalyst is added at 2% v/w. Crestomer 1150PA can be applied with a spatula or from a dispensing unit, taking care to keep air entrapment to a minimum. Application should always be carried out at temperatures above 15°C. Recommended temperature range for application is between 18 and 25°C. 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 obtained under controlled conditions at the Scott Bader laboratory.

Storage
The shelf life for Crestomer 1150PA is from the date of manufacture when stored at a recommended temperature between 15°C and 20°C. Long term exposure above 23°C will reduce the shelf life of these materials.

The product should be stored in its original container out of direct sunlight. The bulk product material should be opened only immediately prior to use, and it's highly recommended that products should never be frozen or exposed to temperatures above 35˚C during shipping or storage.

Packaging
Crestomer 1150PA is supplied in 25Kg and 200Kg containers.

Health and Safety
See separate Material Safety Data Sheet.

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SCOTT BADER COMPANY LIMITED
Wollaston, Wellingborough, Northamptonshire, NN29 7RL
Telephone: +44 (0) 1933 663100
Facsimile: +44 (0) 1933 666623
www.scottbader.com