



Product Overview

Crestomer® 1151A is an advanced structural adhesive and filleting compound specifically formulated for use in bulk metering systems. Crestomer® 1151A is non-sagging, fast curing and parts bonded using Crestomer® 1151A are workable in 2.5 hours. It bonds a wide range of substrates with minimal surface preparation and has demonstrably lower odour than competitive structural adhesives.

Features and Benefits

Urethane acrylate base

Excellent retention of toughness

Highly thixotropic

Controlled cure and exotherm behaviour

Fast curing and setting



Improved aesthetics and better surface finish

Excellent adhesion and high elongation at break

Non sagging on vertical surfaces

Excellent fatigue and impact resistance

Reduced assembly time

Application properties	
Working time ¹	25 minutes
Fixture time ²	2.5 hours
Gap filling	1 – 20 mm/ 0.04 - 0.8 inch
Colour change (over cure)	None
Recommended application temperature	18°C - 25°C / 64°F - 77°F

Mechanical properties	
Tensile strength ⁵	22 - 25 MPa
Tensile modulus ⁵	1000 - 1500 MPa
Tensile elongation ³	100 - 120%
Lap shear cohesive strength ⁶	12 - 15 MPa
Hardness	65 Shore D
Approvals	Lloyds

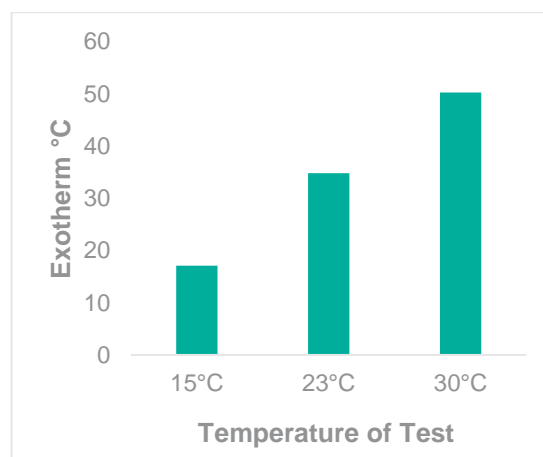
Liquid properties	
Product	1151A
Viscosity ³	250,000 - 320,000 cP
Specific gravity	1.05
Mixed ratio ⁴ (by volume)	50:1
Appearance	Green / Yellow gel
Shelf life	12 months

Recommended Substrates

	Recommended substrates (Lap shear strength MPa ⁶)	Non - recommended substrates
Metals	Stainless Steel ⁷ – 11 – 12 MPa Aluminium ⁷ 5 – 8 MPa	-
Wood	Marine ply ⁸ - 2 – 4 MPa Balsa ⁸ 2 – 4 MPa	-
Composites	GRP/FRP ⁸ – 12 – 14 MPa Polyester resin DCPD ⁹ – 7 – 8 MPa Vinyl ester Epoxy	-

Exotherm of Crestomers[®]

High exotherm in an adhesive can cause the substrate to distort and give poor aesthetic characteristics to the parts being bonded. The chemistry of Crestomer[®] adhesives ensures that high exotherm temperatures, a characteristic of some other adhesives, does not occur. The graph shows the exotherm temperatures of Crestomer[®] adhesives over a range of test temperatures.



Surface Preparation

As with all adhesives, maximum performance is only achieved with adequate surface preparation. When bonding the back surface of (polyester) GRP, a simple solvent wipe with acetone is a satisfactory pre-treatment to clean and degrease the surface. However, for gelcoated GRP surfaces and for other substrates, a de-grease using acetone or similar followed by abrasion and a final de-grease is recommended.

Application

Crestomer® 1151A is supplied pre-accelerated and ready to use in bulk application systems with standard benzoyl peroxide paste Perkadox BM50LS. Working time can be optimised through catalyst ratio variation to suit specific applications. To maximise properties, it is recommended that Crestomer® 1151A is applied via a bulk dispensing machine. Hand mixing and application is possible but there will be an associated reduction in performance.

Crestomer® 1151A is a versatile material as the recommended temperature range for application is between 5°C and 30°C/ 41°F - 86°F without loss of strength. Crestomer® 1151A will remain free flowing even at low temperatures and so is suitable for use all year round. The use of additional pigments or fillers is not recommended as they can affect the performance of the adhesive.

Crestomer® 1151A has been shown to bond most materials commonly used in the GRP industry, however, the user must determine the suitability of a selected adhesive for a given substrate and application. Contact your local Scott Bader representative with any questions or assistance required 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 and Shelf Life

Crestomer® 1151A should be stored between 2°C and 23°C/ 36°F and 73°F in the original unopened container in a dry well ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. Exposure to temperatures outside these conditions will affect shelf life. Ideally containers should be opened only immediately prior to use.

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® 1151A is supplied in 25Kg/ 55 lbs and 200Kg/ 440lbs containers.

1. Gelttime measured with 100g mass of adhesive at 25°C/ 77°F. Using 2% BPO catalyst.	
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 volume and weight for both machine dispensing and hand mixing.	
5. Tested to BS EN ISO 527-2	
6. Metals test to ASTM D1002 for Lap Shear Strength, Composites and Marine Ply test to ASTM 5868 for Lap Shear Strength, Balsa tested to ASTM D3807 for Cleavage Peel. 23°C.	
7. Adhesive Failure When Tested	8. Substrate Failure When Tested

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