



Glass Adhesive Sealant PU 590

Product Data Sheet

February 2013
Supersedes: November 2008

Product Description

3M™ Polyurethane Glass Adhesive Sealant 590 is a fast curing one-component, high viscosity polyurethane sealant for bonding windshields and other substrates requiring high strength.

Structurally bond windshields. This product has been crash tested meeting FMVSS 212.

Typical Uncured Properties

Appearance	Thixotropic paste
Colour	Black
Density (g/ml) (DIN EN ISO 2811-2)	ca. 1.20
Skin formation time (min) (ISO 291, 23°C, 50% RH)	25 - 40min

Performance Characteristics

Application temperature	5°C – 35°C
Water and Salt Spray Resistance	Excellent
Cure time, mm/24hrs (ISO 291, 23°C, 50% RH)	> 3.5mm/24 h
Shore A Hardness (ISO 868-3 seconds)	60 – 65
Elongation at Break (ISO 37)	>700%
Modulus at break (ISO 37)	> 6 MPa
Shearing resistance at 5h at 23°C and 50% HR (Ford SAE J 1529)	> 0.9 MPa
Shearing Resistance at 7d at 23°C and 50% HR (Ford SAE J 1529)	> 3.4 MPa
Crash test (Standard FMVSS 212)	resists after 3h at 23°C, 50% r. h.

Instruction for Use

Please refer to the Technical Service Bulletin:
Windscreen Application Instructions with 3M™ Powerline 590 and 503

Shelf Life

9 months in hermetically sealed original cartridges or sausages between 5°C and 25°C from date of manufacture.
6 months in drums between 5°C and 25°C from date of manufacture.

Precautionary Information

Refer to product label and Material Safety Data Sheet for health and safety information before using the product.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.

This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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