



Marine Fast Cure UV Resistant Adhesive Sealant 4000UV

Product Data Sheet

Date: February 2013
Supersedes: January 2009

Product Description 3M™ Marine Fast Cure UV Resistant Adhesive Sealant 4000UV is a one-part sealant that cures to form a firm, rubbery waterproof seal. Its flexibility allows for the dissipation of stress caused by shock, vibration, swelling or shrinking. Designed for marine applications above and below the waterline. Its superior UV resistant properties make this an ideal cosmetic sealant.

- Key Features**
- Superior UV resistance
 - Exceptional sealing properties
 - < 1%VOC
 - Low odour
 - Non-shrinking
 - Non-sagging
 - Non-corrosive
 - Non-cracking
 - Caulkable at low temperatures (-40°C)
 - Fast curing
 - Paintable (test for suitability)

Technical Data

Base	MS Polymer
Appearance	Pasty
Colour	White
Density (g/ml) (DIN EN ISO 2811-2)	Black: 1.14 ± 0.05
Sagging (mm) (ISO 7390)	None
Application temperature	5°C to + 35°C
Skin formation time (min) (ISO 291, 23°C, 50% RH)	30 to 60 min
Cure time, mm/24h (ISO 291, 23°C, 50% RH)	>3 mm/24 h
Service Temperature	-40°C to 90°C
Shore A Hardness (ISO 868-3 seconds)	40 to 60
Consistency	Pasty
Resistance to dilute acids and bases	Good
Water and salt spray resistance	Excellent
Consistency	Pasty
Elongation at Break (ISO 37)	>100 %
Modulus at 100% (ISO 37)	>0.6 MPa
Compatibility with paints	Water based : yes / Solvent based : carry out tests beforehand

Heat Resistance:	Long term exposure to temperatures greater than 80°C will decrease tensile strength over time. For this reason these products should not be used in applications where the temperatures will continuously exceed 80°C.
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Direction for use	<p>Surface Preparation: Surfaces to be sealed or bonded must be clean and dry. Surfaces should be free from grease, mould release, oil, water/condensation and other contaminants that may affect the adhesion of the sealant. Abrading with 180 to 220 grit abrasive followed by a solvent wipe will improve the bond strength. Suitable solvents include 3M™ Citrus Based Adhesive Remover, 3M™ Scotch-Weld™ Solvent No. 2 or methyl ethyl ketone (MEK).*</p> <p>*When using solvents, use in a well ventilated area. Extinguish all sources of ignition in the work area and observe product directions for use and precautionary measures. Refer to product label and MSDS for further precautions. Always pre-test solvent to ensure it is compatible with substrates.</p> <p>Local and federal air quality regulations may regulate or prohibit the use of this product or surface preparation and cleanup materials. Consult local and federal air quality regulations before using these products.</p> <p>Use of a primer is an extra step and cost and will depend on substrates and the final end use. Using primer can improve the corrosion resistance of certain metals as well as improve the durability of the bond when exposed to high humidity conditions. For most applications high strength bonds on metal can be achieved without the use of a primer. Pre-testing for adhesion is suggested to determine if a primer is needed. The 3M™ Scotch-Weld™ Structural Adhesive Primer EC-1945 B/A works well for most metals.</p>
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Application:	Puncture seal in nozzle and knock out the thin seal at cartridge bottom before placing in caulking gun. Assemble tip and retaining ring on gun, cut tip to desired size. Product should be used within 24 hours after seal is punctured and should be pressed firmly into the joint to ensure adequate contact of the sealant with the substrate. Apply product when temperatures are between 5°C and 35°C. Do not apply on frozen surfaces or wet surfaces. Do not apply over silicones or in the presence of curing silicones. Avoid contact with alcohol and solvents during curing. Sealant can be tooled immediately after applying to give desired appearance.
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Cleanup:	While sealant is still soft cleaning can be done with the same solvents used for surface preparation. If sealant is already cured, removal is done mechanically with razor knife, piano wire, sanding or 3M™ Scotch-Brite™ Moulding Adhesive and Stripe Removal Disc. This disc is available from 3M Automotive Aftermarket Division.
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Application Equipment Suggestions	Cartridge and Flex Pack: For ease of dispensing an all metal, rod driven, friction feed manual applicator gun or an air operated applicator gun is suggested. Please contact your 3M sales representative for these items.
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Bulk Dispensing:

For bulk dispensing a 46:1 ratio dual action piston pump with a ram is suggested. Actual equipment is dependent on the fluid flow desired, the number of guns to be supplied for each pump and distance product has to be pumped. It is best to consult with the equipment supplier to make sure the proper type and size of equipment is specified. Common suppliers of this type of pumping systems are Graco and Binks. It is best to work with a distributor for Graco or Binks located in your area. Our technical service group will be glad to work with you and your chosen supplier to ensure the proper equipment is selected.

Shelf Life	12 months in the original, hermetically sealed packaging between 5°C and 25°C after date of manufacture
Precautionary Information	Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information please contact your local 3M Office. www.3M.com
For Additional Information	To request additional product information or to arrange for sales assistance, go to www.3M.be/bonding or www.3M.nl/bonding
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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