

TECHNICAL DATA SHEET

MANUS-BOND 77-AMP XTREME POLYURETHANE SEALANT

PRODUCT DESCRIPTION:

Manus-Bond 77AMP is one-component, non-sag and versatile elastic Sealant based on polyurethane that cures on exposure to atmospheric moisture to form tough, durable bond with excellent cohesion strength and flexibility to versatile surfaces with and without primers. Unlike traditional solvent sealants and/or sealants of its class, 77AMP high performance product is designed with outstanding UV resistance, weathering, aging, shrinkage, joint movement and no-bubbling during cure and long-term durability. Primeless adhesion is obtained on a wide variety of materials such as aluminum, stainless steel, Galvalume®, Zinalume®, Kynar 500®, glass, wood, concrete, masonry, stone, precast, ceramic tile, brick blocks, fiberglass, many plastics, and a wide variety of other substrates. Once it cures, it provides an excellent appearance for aesthetical purposes and can be painted with most paints after a few hours.

AREAS OF APPLICATIONS:

Manus-Bond 77-AMP Sealant is designed to bond almost any material that requires high green strength, and superior strength and longevity. 77-AMP is recommended for sealing around door, windows, and siding, to seal construction joint details, Waterproof rivet seams and roof rails, Outdoor kitchens, and countertops. Its properties of high green strength, durability, flexibility, and non-sag also make it ideal as concrete joint sealant. 77AMP is suitable for elastic bonding (assembly of various materials) and sealing in the Residential, Trailer and Industrial construction, Roofing, Transportation, Retaining walls and Solar Industries.

Features	Advantages
<ul style="list-style-type: none">Initial high-tack, non-sag propertiesHigh Green Strength without the use of primerSuitable under cold and warm applicationsShort cut-off string during applicationNo shrinkage during cureEnhanced weatherabilityAvailable in many different colors to match any substrates	<ul style="list-style-type: none">Cures to tough, durable, elastic sealantAccommodates +/- 25% joint movement.Flexible in low temperaturesExcellent cohesive strength after curePrevents contact corrosion in aluminum-body vehicles.Paintable after few hours of applicationVOC Compliant in all 50 States

77AMP meet the following performance requirements:

- ASTM C 920: Type S, Grade NS, Use NT, Class 25, M, G and A
- Federal Spec. TT-S-00230C Type II Class A
- AAMA 808.3 (Type 1) Exterior Perimeter Sealing
- AAMA 805.2 (Group C) Back Bedding/Glazing
- Manus Internal ISO-9001 Specifications
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MANUS-BOND 77-AMP (POLYURETHANE GRADE SEALANT)

Characteristic	Typical Value or Result ¹
Uncured Properties	
Appearance	No slump, High viscosity paste
Product Base	Polyurethane Backbone Polymer
Color	Various Colors, standard White, grey and black
Curing Mechanism	Moisture Curing
VOC Content	100% Solid (<15 gm/L)
Density (g/cc)	1.53 +/- 0.2
Viscosity	450,000 to 850,000 cps
Curing through volume (mm) (1 day at 23°C and 50% RH)	≥3
Tack-free Time	2 to 6 hrs
Cure Time	24 to 48 hrs
Cured Properties	
Hardness Shore "A"	38 +/- 5
Tensile Strength (PSI (n/mm ²))	306 (2.1)
Elongation	>600%
Joint Movements	± 25%
180° Peel Strength	≥15 lb/in
Paintable	Yes, With latex paint and/or primer
Temperature Resistance (°C)	-40/+70 °C (intermittent/short time up to 94°C)

¹ The values are typical or an approximation for the material and are not intended for use in specifications. Field or environmental conditions or application methods may yield different results.

APPLICATION GUIDELINES:

Surface Preparations and Directions of use:

The surfaces to be applied on should be clean, dry and free from dust and grease. The adhesion on normal vehicle varnishes and standard glass generally does not require the use of Primer. The ability for the adhesive to bond is only as good as the substrate it is applied on. It is advisable to carry out preliminary adhesion tests on the substrate. Avoid exposure of unused material to air or moisture. A premium, high ratio caulking gun that is suitable for high viscosity materials is highly recommended but not mandated.

Clean Up:

Excess cured material must be cut or scraped away followed by wiping with isopropyl alcohol, aromatic or ketone-type solvents. The use of these solvents (or other solvents) may be hazardous to your health. KEEP AWAY FROM OPEN FLAME. Tools and application equipment may be cleaned with the same solvent. Follow the instructions of the solvent manufacturers.

MANUS PRODUCTS

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Precautions:

Some applications may not be compatible with this product. Do not use on joints requiring continuous water immersion, use backing material before filling joints deeper than 3/8" (9.5 mm), full testing is required prior use with polycarbonate and any material that is prone to crazing. In most cases, no primer is required. Some cleaners and solvents may not be compatible with this product. Testing suitability for intended application before proceeding with full application is recommended. Do not use it in direct contact with fire or long-term high temperature applications. Use with adequate ventilation. Inhalation of vapor during application and cure may cause slight eye or throat irritation. In case of contact with eyes, lips, or mouth, flush thoroughly with water. If irritation persists, consult a physician. Avoid repeated, prolonged contact with skin. See SDS for additional information. **KEEP OUT OF REACH FROM CHILDREN.**

User Evaluation:

DUE TO THE NUMBER OF TYPES OF SUBSTRATES AVAILABLE, PRETESTING FOR SUBSTRATE COMPATIBILITY AND ADHESION ON SMALL AREA OF THE SURFACE MUST BE PERFORMED BY THE USER. THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE. PRODUCT MAY NOT BE COMPATIBLE WITH ALL SUBSTRATES, SURFACES, USES, OR APPLICATIONS.

PRODUCT STORAGE:

The product has a shelf life of 12 months after production date in its original packaging (unopened) in a cool, dry place. For maximum shelf life, store unopened containers at temperatures not exceeding 80°F in cool, dry conditions. Keep away from wet areas, direct sunlight, and heat sources.

PACKAGING AND SIZES:

77-AMP Polyurethane Sealant is available in 10.1 fl.oz. cartridge, 20 fl.oz. sausage packs. The standard color is White. Other packaging or colors available upon request.

TECHNICAL SERVICE:

Manus technical representatives are available to help. Please contact our Technical Service Department with your questions or requests for specific applications.

LIMITED WARRANTY:

Any goods proved defective will be replaced or the purchase price refunded. The limited warranty described herein is in lieu of any other warranty, expressed or implied, including any implied warranty of merchantability or fitness for a particular use. The user shall determine the suitability of the product for its intended use. Liability for any incidental or consequential damage or loss is excluded. The user assumes all risks of the product's use, handling, and storage. The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various materials present on the market and the fact that the application conditions are not under our direct control. Manus may modify or update this technical data sheet without advance notice or any obligation to notify any users of changes. Customers are kindly requested to verify that they are in possession of the latest version.

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