



BC BUILDING PRODUCTS
THE ENVELOPE SPECIALISTS

TECHNICAL DATA SHEET

M-1® Universal Adhesive & Sealant

Manufacturer: Chem Link

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SUPPLIED BY BC BUILDING PRODUCTS

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PRODUCT DATA SHEET 260710SOPUS

DESCRIPTION

M-1 is an industry leading highly versatile sealant/adhesive exhibiting properties combining high strength and adhesion with superior flexibility. It is a non-sag, moisture-curing, silyl-terminated polyether (STPE) formulation that adheres well to numerous substrates. It can be applied in wet and dry conditions and in temperatures as low as 32 °F (0 °C). M-1 is solvent free, low odor, UV stable, contains no isocyanates, and may be utilized in occupied spaces. M-1 will not shrink or crack while curing, and it maintains its waterproof seal and adhesion properties with a service temperature range of -40 to 200 °F (-40 to 93 °C). It is available in a variety of colors.

PRODUCT NUMBERS

F1277	M-1 5 FL OZ SQUEEZE TUBE	F1190	M-1 20 FL OZ SAUSAGE
F1270	M-1 10.1 FL OZ CARTRIDGE	F1205	M-1 2 GAL PAIL
F1204	M-1 28 FL OZ CARTRIDGE	F1206	M-1 5 GAL PAIL
		F1279	M-1 50 GAL DRUM

COLORS

Product Number	White (WH)	Black (BL)	Gray (GR)	Limestone (LI)	Tan (TN)	Order multiple
F1277	✓	●	●			36
F1270	✓	✓	✓	✓	✓	24
F1204	✓	●	✓	●	●	12
F1190	✓	●	✓	●	●	12
F1205	●	●	●	●	●	1
F1206	●	●	●	●	●	1
F1279	●	●	●	●	●	1

✓ = stock ● = made-to-order

APPLICABLE PERFORMANCE STANDARDS

- ASTM C920, Type S, Grade NS, Class 35, Uses NT, T1, M, G, A & O
- ASTM E84, Class A
- Meets or exceeds ASTM D4586
- Federal Specification TT-S-00230-C Type II, Class B
- Corps of Engineers CRD-C-541, Type II, Class B
- Canadian Standards Board CAN 19, 13-M82
- SWRI (Sealant Waterproofing and Restoration Institute) Validated
- Miami Dade County, Florida. NOA No.: 19-0709.02
- Nemo-Certified NER FL42267
- Florida Building Code FBC FL9779

FLORIDA BUILDING CODE

MIAMI-DADE COUNTY
APPROVED



NEMO | cert.
CERTIFIED



REGULATORY COMPLIANCE

- Conforms to OTC Rule for Sealants and Caulks
- Conforms to USDA Requirements for Non-Food Contact
- Meets requirements of California regulations: CARB, BAAQMD and SCAQMD
- Tested according to the California Department of Public Health (CDPH) Standard Method v1.2-2017
- Contains no cancer-causing chemicals listed in California Proposition 65

COMPATIBLE SUBSTRATES

- EPDM*, PVC, TPO*, SBS, and APP-modified bitumen
- Galvanized metal aluminum, brass, copper
- Engineered plastics
- Glass
- Masonry: block and brick
- Concrete
- Wood

* Adhesion Tests Required



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APPLICATION GUIDELINES

Prior to application, refer to the Chem Link by SOPREMA Sealant Application Technical Bulletin for complete application instructions. The installer is responsible for ensuring conditions are appropriate to proceed.

- Ensure all substrates are clean, dry, and free of dust, oils, frost, and other contaminants.
- Application on TPO roofing membrane requires Chem Link by SOPREMA's specialty LOW-VOC EPDM/TPO Primer [F1280 LVOC]. Adhesion tests should be performed on EPDM roofs prior to installation.
- It is recommended to test and evaluate the substrates to ensure adequate adhesion.
- Cut cartridge nozzle and load into a professional-grade 26:1 high-thrust ratio caulk gun.
- Carefully gun the sealant with a smooth, continuous bead. Tool the sealant within 15 minutes to ensure proper attachment and to achieve a smooth, uniform finish.
- Full cure is typically reached within 24 hours, but will vary depending on humidity, temperature, and bead depth.
- Protect the sealant from substrate movement and debris until cured.

When removal is required, use sharp hand tools to cut the material from the substrate. Where residue remains, remove using wet methods or solvent cleaner appropriate for the substrate followed by a thorough cleaning and allowing the surfaces to dry before installing new material.

STORAGE AND HANDLING

- Store original, unopened containers in a cool, dry area.
- Protect containers from water, heat, and direct sunlight.
- M-1® will not freeze but the viscosity will increase as the temperature drops.
- Shelf life from the date of manufacture for cartridges and sausages is twelve (12) months, for pails six (6) months. Shelf life is based on storage conditions of 70 °F (21 °C) with 50% relative humidity. Elevated temperatures and/or elevated humidity will significantly reduce shelf life.

JOINT DESIGN

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. Where the joint configuration will not permit a backer rod, Chem Link by SOPREMA recommends that an alternative bond breaker be used.

CONCRETE

Prior to application, remove any residual contamination by mechanical abrasion, sand blasting, or power washing. On green concrete, remove all release agents and loose concrete. Dry all visible and standing water prior to applying M-1®. Install an appropriate backer rod to avoid three-point bonding.

METAL

Prepare all metal to ensure maximum adhesion. Remove all rust, scale, and residue by wire brushing to a bright metal sheen. Remove oils, films, loose or incompatible coatings, with an appropriate solvent cleaner such as isopropyl alcohol.*

*Chem Link by SOPREMA recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.

** For application on thermoplastic polyolefin (TPO) use Chem Link by SOPREMA's specialty LOW-VOC EPDM/TPO Primer [F1280 LVOC].

WOOD

Wood should be clean, sound, and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

PRIMING

In most applications, M-1® will not require a primer. However, certain applications or substrates may require a primer to ensure a long-lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. Chem Link® by SOPREMA recommends a primer be used for any application where prolonged immersion is anticipated.**

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PHYSICAL / MECHANICAL PROPERTIES

Property	Value	Test Method
VOC content, g/L	< 24	ASTM D2369
Viscosity (TF Spindle at 4 RPM, 73 °F (23 °C)), cP	1,200,000 +/- 400,000	Internal
Density, lb/gal (g/cm ³)	12 (1.5)	ASTM D1475
Tack-free time (at 45 +/- 5 % R.H.), min	35 +/- 10	Internal
Elongation at break, %	525	ASTM D412
Hardness, Shore A	45	ASTM C661
Tensile strength, psi (kPa)	370 (2550)	ASTM D412
Shear strength, psi (kPa)	390 (2690)	ASTM D1002
Tear strength, pli (N/mm)	110 (20)	ASTM D624
Low temperature flex, (1/4" mandril), °F (°C)	Pass -15 (-26)	ASTM D522
Shrinkage	No visible shrinkage after 14 days	Internal
Service temperature, °F (°C)	-40 to 200 (-40 to 90)	Internal
Vinyl, glass, and aluminum, pli cohesive failure (N/mm)	55 (9.6)	ASTM C794
Cut concrete (unprimed), pli cohesive failure (N/mm)	36 (6.3)	ASTM C794

WARRANTY AND DISCLAIMER

All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique.

LIMITED WARRANTY: Chem Link Inc. warrants this product's performance, provided it is properly stored and applied within 1 year.

