

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Heatlok® ABS Mastic is a moisture curing, polyether adhesive/sealant designed for applications in damp, dry, or cold climates. Heatlok ABS Mastic is solvent free and contains no isocyanates. Heatlok ABS Mastic will not shrink upon curing, will not discolor when exposed to UV light, and cannot "out-gas", or bubble on damp surfaces as urethane sealants often do. Heatlok ABS Mastic is capable of joint movement in excess of 35% in both compression and extension. Heatlok ABS Mastic can be used effectively in many difficult construction site conditions such as wet or dry climates and at temperatures as low as 32°F (0°C).

ADVANTAGES

- Solvent free, 100% solids will not shrink
- Non-slump, applies vertically and overhead
- 20 minute skin over
- No outgassing on damp surfaces
- Good color stability, will not suntan
- Paintable within 24 hours (see limitations)
- Gun grade, no special tools or mixing required
- Application at temperatures as low as 32°F (0°C)

APPLICABLE PERFORMANCE STANDARDS

- ASTM C920, Type S, Grade NS, Class 35
- Uses NT, T_i, M, G, A & O
- ASTM E84, Class A
- 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
- SWR Institute Validated (Sealant Waterproofing and Restoration)

REGULATORY COMPLIANCE

- Conforms to OTC Rule for Sealants and Caulks
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- This product does not contain cancer causing chemicals listed in California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

GREEN STANDARDS

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 17 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F (115°C))

PACKAGING

- 10.1 oz (300 ml) 24 cartridges/carton, 45 cartons/pallet

COLORS (Color matching is available in batch quantity only)

- White

BASIC USES

- Expansion joints
- Pre-cast concrete
- Block and masonry
- Window and door frames
- Siding
- Parapets
- Cove joints
- Transportation
- Weather sealing

HEATLOK® | ABS MASTIC

AIR BARRIER SYSTEM

COMPATIBLE SUBSTRATES (test and evaluate to ensure adequate adhesion)

- EPDM and SBS mod bit
- Aluminum and galvanized metal
- Stainless steel
- Engineered plastics, PVC
- Glass
- Fiberglass FRP
- Wood
- Block and brick
- EPS foam
- Concrete and stone
- EIFS, stucco

JOINT PREPARATION

Joint surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.

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. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, Demilec recommends that an alternative bond breaker be used.

Joint Width	Joint Depth
1/4" - 1/2" (6 - 13mm)	1/4" (6mm)
1/2" - 3/4" (13 - 19mm)	1/4" - 3/8" (6 - 10mm)
3/4" - 1" (19 - 25mm)	3/8" - 1/2" (10 - 13mm)

Demilec recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties.

Typical Peel Values ASTM C794	
Vinyl	55 pli cohesive failure
Glass	55 pli cohesive failure
Aluminum	55 pli cohesive failure
Cut Concrete (unprimed)	36 pli cohesive failure

TYPICAL PHYSICAL PROPERTIES		
Properties	Heatlok ABS Mastic	Test Standard
Gun Grade	Zero Slump	n/a
Viscosity	1,200,000 cp +/- 400,000 cp	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density	11.94 lbs per gallon	ASTM D 1475
Tack Free Time	35 min +/- 10 min	45 +/- 5 % R.H.
Elongation at Break	525%	ASTM D 412
Hardness Shore A	45	ASTM C 661
Tensile Strength	370 psi	ASTM D 412
Shear Strength	390 psi	ASTM D 1002
Tear Strength	111 pli	ASTM D 624
Low Temperature Flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D 816
Shrinkage	No visible shrinkage after 14 days	n/a
Service Temperature	-40°F to 200°F (-40°C to 93°C)	n/a

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AIR BARRIER SYSTEM

CONCRETE

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying Heatlok ABS Mastic. 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 films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

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

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 instances Heatlok ABS Mastic 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. Demilec recommends a primer be used for any application where prolonged immersion is anticipated.

CLEAN-UP

Wet sealant can be removed using a solvent such as alcohol. Cured Heatlok ABS Mastic can be removed by abrading or scraping the substrate.

STORAGE

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. Heatlok ABS Mastic will not freeze.

SHELF LIFE

Twelve months from date of manufacture when stored at 70°F (21°C) with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life. Pails have a shelf life of six months.

APPLICATION INSTRUCTIONS

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain Heatlok ABS Mastic at room temperature before applying to ensure easy gunning and tooling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

CAUTION

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information. See www.chemlink.com for most current SDS. KEEP OUT OF REACH OF CHILDREN.

LIMITATIONS

- Horizontal applications will require tooling.
- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Allow asphalt to cure a minimum of six months before applying Heatlok ABS Mastic
- Remove all coatings and sealers before application.
- Please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Test and evaluate all paints before application. Polyurethane and oil based paints may dry slowly.
- Do not use on TPO without a primer. Contact Demilec for more details.
- Does not bond to Kynar 500® PVDF coated metals.