

Technical Data Sheet

Enduris* Seam Sealant

silicone seam sealer mastic

Product Description

GE Enduris silicone seam sealant is a high performing sealant for protection of seams, penetrations, and fasteners on various architectural surfaces and roofing substrates. Upon cure, Enduris Seam Sealant forms a durable, breathable and weatherproof barrier that is highly resistant to degradation from UV and natural weathering.

Key Features and Typical Benefits

- Silicone Durability Cured silicone rubber exhibits excellent long-term resistance to natural weathering including: extreme temperatures, ultraviolet radiation, rain and snow.
- VOC Compliant High solids solvent-free formulation and low Volatile Organic Compounds content.
- Ease of Use Single-component material that can be applied with trowel, stiff brush or glove hand. Adequate open time provides sufficient time for tooling to applied area.
- · High Build Formulation Low sag.
- Storage & Shelf Life Enduris Seam Sealant can be stored in unheated warehouses during the cooler months without the risk of freezing. Shelf life is 18 months from date of manufacture when properly stored.

Installation and Application Considerations Surface Preparation

Enduris Seam Sealant can be applied to itself as well as a variety of roofing materials and substrates including: single ply membranes (TPO, PVC, EPDM, CSPE, and hypalon), spray-applied polyurethane foam, metal, concrete and common parapet/coping materials. Asphaltic substrates such as; modified bitumen, smooth BUR, and granulated cap sheet which may require bleed blocker. Surfaces to which Enduris Seam Sealant is to be applied must be clean, dry, structurally sound and free of loose particles, dirt, dust, oil, frost, mildew and other contaminants. Damage to the underlying roof system, such as cracks, openings, holes, etc. should be properly repaired prior to application. Saturated substrates must be removed and repaired appropriately. Users of Enduris Seam Sealant should verify that suitable adhesion can be attained to all existing roofing materials to be sealed prior to large scale application of the sealant. It is recommended that a test patch be cleaned and sealed with Enduris Seam Sealant to verify the effectiveness of the cleaning method and adhesion to the surface(s).

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Application Guidelines

Cured material can be removed from surfaces with a razor blade, or scrubbed off with steel wool or synthetic abrasive pads and solvent. Surfaces not intended for sealant should be masked or covered.

Apply Enduris Seam Sealant to ensure a uniform build and thorough coverage. Enduris Seam Sealant is typically applied in one application. If applying in multiple applications, allow adequate time between each application for the sealant to cure before applying additional material. Final cured thicknesses must be free of voids, pinholes, cracks or blisters.

Application Temperature

Enduris Seam Sealant can be applied throughout the year as long as the substrates being sealed are completely dry. Frost and/or moisture will interfere with adhesion. Lower temperatures will lengthen the skin over, tack free and ultimate cure time and may require an overnight cure in winter months to allow the top coat application to proceed (film build may not be sufficient to allow walk over). Higher temperatures will accelerate the cure rate and decrease the open time of the sealant. Under summer conditions time to apply top coat over sealant may be as short as 1 hour. Do not apply Enduris Seam Sealant when substrate surface temperatures exceed 176°F (80°C).

Application Equipment

Enduris Seam Sealant can be applied by trowel, stiff brush or gloved hand. Cleanup of equipment containing uncured material may be accomplished by cleaning with mineral spirits or toluene.

DO NOT USE water or alcohol based solvents.

Packaging & Colors

Enduris Seam Sealant is currently available in nominal 2 gallon plastic pails filled to 20 LBS - (9.08 KG).

Colors

Enduris Seam Sealant is currently available as a stockcolor in bright white.

Typical Physical Properties

Typical physical property values of Enduris Seam Sealant is set forth in the tables below.

Typical Physical Properties

| Property ⁽¹⁾ | Value ⁽²⁾ | Test Method |
|-----------------------------|----------------------|------------------------------|
| Appearance | Bright White | Visual |
| VOC | ~34 g/L | EPA Method 24 |
| Application Rate | 500-1000 g/min | E56 |
| Specific Gravity | 1.18-1.25 | P15 |
| Sag/Slump | 1 inch (25 mm) | ASTM D2202 |
| Skin-Over Time | 5-10 minutes | WPSTM C-560 |
| Tack Free Time | 30-60 minutes | ASTM C679 |
| Cure Time | 3-4 days | 1/4" (6 mm) depth of cure |
| Hardness (A) Type Indenter | 24 | ASTM D2240 |
| Ultimate Tensile Strength | 220 psi (1.52 MPa) | ASTM D412 |
| Tensile at 50% Elongation | 52 psi (0.358 MPa) | ASTM D412 |
| Tensile at 100% Elongation | 86 psi (0.593 MPa) | ASTM D412 |
| Ultimate Elongation | 230% | ASTM D412 |
| Joint Movement | ±25% | ASTM C719 |
| Low Temperature Flexibility | Pass | ASTM D522 (B) |

⁽¹⁾ Properties tested @ 72°F (24°C), 50% RH

Technical Services

Additional technical information, literature, laboratory testing and application engineering are available upon request. Any technical advice furnished by Momentive Performance Materials (MPM) or any representative of MPM concerning any use or application of any sealant is believed to be reliable but MPM makes no warranty, expressed or implied, of suitability for use in any application for which such advice is furnished.

Customer Evaluation

Customers must evaluate MPM products and make their own determination as to fitness of use in their particular applications.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

⁽²⁾ Typical properties are average data and are not to be used as or to develop specifications.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.ge.com/silicones. or, upon request, from any Momentive Performance Material representative. Use of other materials in conjunction with Momentive Performance Materials sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Storage & Handling

Enduris Seam Sealant should be stored in unopened containers and protected from exposure to direct sunlight and high heat. Do not open containers until ready for use and store containers below 109°F (43°C) to maintain full shelf life. Enduris Seam Sealant generally can be stored in unheated warehouses during the cooler months without the risk of freezing.

Enduris Seam Sealant reacts with atmospheric moisture to cure. Once containers are open and exposed to the atmosphere, a skin will form on the material over time. The formation of skin will be negligible in winter months but can form quickly (minutes) under hot and humid summer conditions. Cured skin that has formed on the top of the material should be removed or screened. Take appropriate precautions to cover open containers during use.

Enduris Seam Sealant should be applied as received and dilution with solvent is not recommended. If settling in the package has occurred, stir or shake the material prior to use.

Limitations

Enduris Seam Sealant is not intended nor recommended:

- For use on pedestrian, deck or frequent traffic bearing surfaces.
- Cold storage roofing application without vapor barrier, cryogenic tank applications or continuous water immersion service.

Enduris Seam Sealant should not be applied to:

- Unprepared surfaces including but not limited to those that are wet, dusty, oily, mildewed, heavily chalked, blistered or otherwise structurally unsound.
- Building materials that might bleed oil or solvents. These include, but are not limited to, certain vulcanized rubber products, tapes, failed sealants, some caulking compounds and asphaltic/mastic materials unless appropriate preparation or primers are used. Consult MPM technical services for primer recommendations.
- Surfaces where adhesion has not been verified by testing.

Precautions

- Inclement weather may negatively affect uncured Enduris Seam Sealant by displacement of uncured material; therefore, application of sealant should not proceed if heavy rain, hail or snowfall is impending or expected within 24 hours of application.
- Enduris Seam Sealant requires atmospheric moisture for propagation of cure thus it is not suitable for use in totally confined spaces.

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Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC), Transport Canada (CANUTEC), and the Chemical Emergency Agency Service also maintain an around-the-clock emergency service for all chemical products.

| Location | GE Branded Products | All Chemical Products |
|---------------------------|--|---|
| U.S., Puerto Rico, Canada | 1.518.233.2500 | CHEMTREC: 1.800.424.9300 CA: CANUTEC: 1.613.996.6666 (collect) |
| At sea | Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 1.518.233.2500 | CHEMTREC: 1.800.424.9300 |

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

CUSTOMER SERVICE CENTERS

| Americas | 1.866.275.4372 |
|----------|--|
| | 1.614.986.2495 |
| | Email: commercial.services@momentive.com |
| V | |

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