

CARLISLE'S

Low-VOC Bonding Adhesive



Overview

Low-VOC Bonding Adhesive is a high-strength, solvent-based contact adhesive that allows bonding of EPDM and TPO membrane to various porous and non-porous substrates. It is specially formulated using a blend of VOC-exempt and non-exempt solvents to be in compliance with the state of California Clean Air Act of 1988 (updated in 1997) and as further regulated by California's Air Quality Control Districts listing VOC grams per liter limitations. This product also meets the < 250 gpl VOC content requirements of the OTC Model Rule for Single-Ply Roofing Adhesives. Low-VOC Bonding Adhesive is compatible with polyisocyanurate insulation, structural and lightweight concrete, plywood, oriented strand board, wood fiberboard, SECUROCK®, gypsum, masonry, smooth BUR, mineral cap sheet, smooth modified bitumen and various metal finishes. Low-VOC Bonding Adhesive is easily applied with a 9" (73 mm) medium nap roller to create a strong adhesive bond between the membrane and substrate.

Intended Uses

Low-VOC Bonding Adhesive is ideal for bonding EPDM and TPO membranes to various porous and non-porous substrates.

Features and Benefits

- High-strength adhesive that allows quick bonding
- Can be applied with a medium nap roller for ease of application
- Provides excellent adhesion between various substrates and EPDM or TPO membranes

Application

1. The surface, on or against which adhesive is to be applied, shall be clean, smooth, dry, free of fins, sharp edges, loose and foreign materials, oil and grease. Depressions greater than 1/4" (6 mm) should be feathered using epoxy, mortar or other approved patching material. All sharp projections shall be removed by sweeping, blowing or vacuum cleaning.
2. After thorough stirring (minimum 5 minutes), apply Low-VOC Bonding Adhesive to substrate and membrane using a 9" (73 mm) medium nap roller. Application shall be continuous and uniform, avoiding globs or puddles. An open time of 5 to 50 minutes, based on drying conditions, is recommended before assembly. Low-VOC Bonding Adhesive must be allowed to dry until it does not string or stick to a dry finger touch. Any coated area, which has been exposed to rain, should be allowed to dry and then recoated. **Do not apply adhesive to splice areas to be hot air welded.**
3. Roll the membrane onto the adhesive-coated substrate while avoiding wrinkles. Immediately brush down the bonded portion of the sheet with a soft bristle push broom or a clean, dry roller applicator to achieve maximum contact.

* General properties. Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product.

** REVIEW CURRENT CARLISLE SPECIFICATIONS AND DETAILS FOR SPECIFIC APPLICATION REQUIREMENTS.

Precautions

1. Review the applicable Material Safety Data Sheet for complete safety information prior to use.
2. Low-VOC Bonding Adhesive is **EXTREMELY FLAMMABLE** - It contains solvents that are dangerous fire and explosion hazards when exposed to heat, flame or sparks. Do not smoke while applying. Do not use in a confined or unventilated area. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flashback. All containers should be grounded when material is transferred from one container to another. A red caution label is required when shipping. A fire extinguisher should be available. In case of fire, use water spray, foam, dry chemical or carbon dioxide. Do not use a solid stream of water because it can scatter and spread the fire.

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- Avoid breathing vapors. Keep container closed when not in use. Use with adequate ventilation. If inhaled, remove to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately. During application, efforts must be made to prevent fumes from entering the building via air ventilation ducts. Do not place open containers or mix adhesive near fresh air intake units. When possible, shut down or seal off the closest units.
- If swallowed, **DO NOT INDUCE VOMITING**. Call a physician immediately.
- Avoid contact with eyes. Safety glasses or goggles are recommended. If splashed in eyes, immediately flush eyes with plenty of clean water for at least 15 minutes. Contact a physician immediately.
- Avoid contact with skin. Wash hands thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water. Contact physician if irritation persists.

Note: Permeation-resistant gloves (that meet ANSI/ISEA 105-2005) are recommended to be worn when using this product to protect hands from irritating ingredients.

- Do not thin Low-VOC Bonding Adhesive. Thinning will affect performance. Excessively thick or gelled material should be discarded.
- Jobsite storage in excess of 90°F (32°C) may affect product shelf life. Should the Low-VOC Bonding Adhesive be stored at temperatures lower than 60°F (15°C), restore to room temperature prior to use.

- Opened containers of Low-VOC Bonding Adhesive should be used within 48 hours. Adhesive will begin to thicken after this point, making it difficult, and eventually impossible, to control applied thickness. In hot weather, do not leave sealed containers on roof for prolonged periods of time. In cold weather, keep material at room temperature until ready to use. Stir adhesive occasionally while using.
- Adhesive must be allowed to dry thoroughly.** If membrane is mated with the substrate prior to the adhesive being dry, blistering will occur.
- KEEP OUT OF THE REACH OF CHILDREN.**

Mixing

Stir thoroughly until all settled pigments are dispersed and the cement is uniform in color. Minimum 5 minutes stirring is recommended.

Coverage

Carlisle Low-VOC Bonding Adhesive - 60 ft² (5.6 m²) per gallon finished surface. Coverage rates are average and may vary due to conditions on the jobsite. Porous surfaces and substrates may require more bonding adhesive than the typical coverage rate.

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Typical Properties and Characteristics

Base:	Synthetic Rubber
Color:	Yellow
Solids:	20.3%
VOC:	250 g/l Max.
Flash Point:	0°F (-17°C) Closed Cup
Brookfield Viscosity:	3800 Centipoises
Avg. Net Weight:	9.4 lbs/gal (4.3 Kg)
Packaging:	5 Gal. Pail
Shelf Life:	1 year

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