

## **Low VOC BONDING ADHESIVE**

### **PRODUCT DESCRIPTION**

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.

### **TYPICAL PHYSICAL PROPERTIES**

<b>Typical values*</b>	
Base Material	Synthetic Rubber
Color	Yellow
Solids	20.3%
VOC:	250 g/l max
Flash Point	0° F (-18° C) Closed Cup
Brookfield Viscosity	3500 Centipoises
Avg Net Weight	9.4 lbs. / gallon (4.3 Kg)
Packaging	5 Gallon Pails
Shelf Life	1 Year

\*General properties. Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification or specification range for any particular property of this product.

### **PACKAGING**

5 Gallon Pails

### **COVERAGE RATES**

Coverage for Low VOC Bonding Adhesive is approximately 60 ft<sup>2</sup> (5.6 square m) per gallon (finished surface.) This coverage rate is an average and may vary due to conditions on the job site. Porous surfaces and substrates may require more bonding adhesive than the typical coverage rate.

### **INSTALLATION TEMPERATURE**

If adhesive is store at temperatures less than 60° F, restore to room temperature (~70° F) before using.

### **INSTALLATION INSTRUCTIONS**

#### **Surface Preparation**

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.

## Low VOC BONDING ADHESIVE

### Application

1. After thorough stirring (minimum 5 minutes), apply Low VOC Bonding Adhesive to substrate and membrane using a 2" (13 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.**
2. 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.
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### 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.
3. 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.
4. If swallowed, **DO NOT INDUCE VOMITING**. Call a physician immediately.
5. 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.
6. 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.
7. Do not thin Low VOC Bonding Adhesive. Thinning will affect performance. Excessively thick or gelled material should be discarded.
8. Job site 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.

## **Low VOC BONDING ADHESIVE**

9. 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.
10. **Adhesive must be allowed to dry thoroughly.** If membrane is mated with the substrate prior to the adhesive being dry, blistering will occur and not subside over time.
11. **KEEP OUT OF THE REACH OF CHILDREN**
12. **MIXING: Stir thoroughly until all settled pigments are dispersed and the cement is uniform in color. Minimum 5 minutes stirring is recommended.**

### **STORAGE & HANDLING**

Job site 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.

### **PROTECTION & SAFETY**

Mule-Hide maintains Material Safety Data Sheets on all of its products. Material Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Material Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

### **ADDITIONAL INFORMATION**

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at [www.mulehide.com](http://www.mulehide.com) for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

### **DISCLAIMER**

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