



Product Data Sheet

Low-VOC PVC BONDING ADHESIVE

PRODUCT DESCRIPTION

A high strength solvent-based contact adhesive that allows bonding of PVC and KEE membranes 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 limitations. This product also meets the <250 gpl VOC content requirements of the OTC Model Rule for Single Ply Roofing Adhesive.

BASIC USES

Mule-Hide Low VOC PVC Bonding Adhesive is used for bonding PVC flashings and membranes to a variety of substrates.

TYPICAL PHYSICAL PROPERTIES



Typical Properties and Characteristics*	
Base	Synthetic Rubber
Color	Pale Yellow to Orange to Amber
Solids	23.6% to 29.6%
Flash Point	-4° F (-20° C) SETA
Brookfield Viscosity	1500 to 4500 Centipoises
Avg. Net Weight	6.9 to 7.7 lbs/gal (0.8 to 9 kg/l)
Packaging	5 Gallon Pail
Shelf Life	1 year

LEED Information	
Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
VOC Content	<250 g/l
Manufacturing Location	Carlisle, PA

*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.

BENEFITS & SUPPLEMENTAL STATEMENTS

- High strength adhesive with quick bonding characteristics
- Ease of application with a medium nap roller
- Provides excellent adhesion between PVC & KEE membranes and a variety of substrates

CODE APPROVALS/COMPLIANCE

A variety of Factory Mutual Ratings and Underwriter Laboratory Classifications are available. Contact Mule-Hide Technical Department for additional information.

COVERAGE RATES

60 ft² (5.6 square m) per gallon finished surface. Coverage rates are 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 stored at temperatures lower than 60° F, restore to room temperature (~70° F) before use.

Product Data Sheet

Low-VOC PVC BONDING ADHESIVE

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.

Mixing

1. **Stir thoroughly until all settled pigments are dispersed and the adhesive is uniform in color. Stir adhesive for a minimum of 5 minutes.**

Application

1. After thorough stirring (minimum 5 minutes), apply Low VOC PVC Bonding Adhesive to substrate and membrane using a 9" (228 mm) wide, 1/2" (13mm) medium nap roller. Application shall be continuous and uniform avoiding globs or puddles. An open time of 5 to 90 minutes, based on drying conditions is recommended before assembly. Low VOC PVC Bonding Adhesive must be allowed to dry until tacky but 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 seam areas.**
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.

REVIEW CURRENT MULE-HIDE SPECIFICATIONS & DETAILS FOR SPECIFIC APPLICATION REQUIREMENTS.

PRECAUTIONS

1. Review the applicable Material Safety Data Sheet for complete safety information prior to use.
2. Low VOC PVC 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 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.
6. 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.

Product Data Sheet

Low-VOC PVC BONDING ADHESIVE

PRECAUTIONS (continued)

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.

7. Do not thin PVC Low-VOC Bonding Adhesive. Thinning will affect performance. Excessively thick or gelled material should be discarded.
8. Opened containers of PVC Low-VOC Bonding Adhesive should be used within 48 hours. Adhesives 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.
9. Adhesive must be allowed to dry thoroughly. If membrane is mated with the substrate prior to the adhesive being dry, blistering will occur and will not subside over time.
10. KEEP OUT OF REACH OF CHILDREN.

PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. 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 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 for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate at the time of printing. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not authorize anyone to make any warranty of merchantability or fitness for any particular purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the alleged failure before repairs are made.