

# Product Data Sheet AQUA BASE 120 BONDING ADHESIVE

# PRODUCT DESCRIPTION

Aqua Base 120 is a semi pressure-sensitive water base bonding adhesive that can be used with Mule-Hide fleece back membranes as well as standard (non fleece back) EPDM and TPO membranes. Aqua Base 120 offers high peel strength with low-VOCs and no strong odors.

# BASIC USES

Aqua Base 120 bonding adhesive can be used as a single side, wet lay-in adhesive on horizontal surfaces with our Mule-Hide fleece back membranes. It can also be used as a two-sided, contact adhesive with our standard (non-fleece back) EPDM and TPO roofing membranes on both vertical and horizontal surfaces.

May be used as a component in Mule-Hide warranted systems up to 20 years



# **TYPICAL PHYSICAL PROPERTIES**

Typical values*	
Base Material	Acrylic
Color	Pink (yellow cast when dry)
Solids	57.5%
VOC:	8 g/l max
Flash Point	>212°F
Brookfield Viscosity	20,000 Centipoises
Avg Net Weight	8.8 lbs. / gallon (3.99 Kg)
Packaging	5 Gallon Pail
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

**Fleece Back Membranes** - Single-side, wet lay-in: Coverage rate for Aqua Base 120 applied as single side, wet lay-in is approximately 100 to 120 ft<sup>2</sup> (10.2 square m) of finished surface per gallon

**Standard (non-fleece back) Membranes** - Double-sided, contact lay-in: Coverage rate for Aqua Base 120 applied as double sided, contact lay-in is approximately 100 to 120 ft<sup>2</sup> (5.1 square m) of finished surface per gallon (membrane and substrate).

These coverage rates are 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 information shown above.

# **INSTALLATION TEMPERATURE**

Adhesive is designed to be applied when ambient temperature is 40°F (4°C) and rising. Do not apply if ambient temperature will drop below 32°F (0°C) before adhesive completely dries.

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# **INSTALLATION INSTRUCTIONS**

- 1. The surface to which adhesive is to be applied must be clean, smooth, dry, free of fins, sharp edges, loose and foreign materials. Depressions or offsets greater than ¼" should be feathered using epoxy, mortar or other approved material. All sharp projections shall be removed by sweeping, blowing or vacuum cleaning.
- 2. Aqua Base 120 bonding adhesive is approved for use over Polyiso, Dens Deck Prime, High Density Fiberboard, OSB, Plywood, cellular lightweight concrete and structural concrete.
- 3. Mix adhesive thoroughly scraping the sides and bottom of the can (minimum of 5 minutes is required) until adhesive is uniform in color.
- 4. Using a ¼" or ¾" nap roller apply adhesive in a uniform manner avoiding globs, puddles and holidays (uncoated areas). Avoid accumulation of adhesive between insulation joints. Do not exceed published application rates.

#### Single Side (wet lay-in) Application with Fleece Back Membranes

- 1. Apply a smooth even coating of Aqua Base 120 bonding adhesive to the substrate at the rate of 100 to 120 square feet per gallon and immediately roll the fleece back membrane into the wet adhesive. If adhesive has turned yellow in color, it is too dry and must be recoated with additional adhesive.
- 2. Once the membrane has been mated to the substrate, roll the membrane with a 100 to 150 lb weighted roller to ensure proper contact and 100% adhesion.
- Cure rates are between 12 to 72 hours depending on porosity of substrate and weather conditions. Re-rolling of the membrane within 24 hours may be necessary if substrate is un-even or the sheet contains some fullness. Temporary weighting of the membrane may be necessary until the adhesive cures. Do not use Fleece Back PLUS membranes for the wet lay-in application.
- 4. Do not apply adhesive in seam lap areas that are to be heat welded.

#### Two-Sided Contact Application with Standard (non- fleece back) Membranes - Horizontal Surfaces

- 1. Apply a smooth, even coat of Aqua Base 120 bonding adhesive to the back side of the membrane and substrate. Do not apply adhesive in area of seam laps.
- 2. Coverage rate to be approximately:

240 square feet per gallon for one surface (membrane or substrate only) or 120 square feet per gallon per finished surface (membrane and substrate)

- 3. Allow adhesive to dry until it turns yellow and does not transfer to a dry finger or pull away from the substrate. Aqua Base 120 bonding adhesive will take a longer time to dry. Adhesive must be dry but still tacky (but not string) when the sheet is mated to the substrate. Do not allow to over dry.
- 4. Mate surfaces together avoiding wrinkles. Immediately roll the bonded area of the sheet with a 100 to 150 lbs roller to ensure full contact. It is important to thoroughly roll the membrane over all insulation joints. Repeat this procedure for remaining sheets.
- 5. Extended drying times can be expected during cool, overcast, humid, shaded, or late day applications. The adhesive must be dry (but still tacky) before mating surfaces to avoid permanent blisters due to trapped moisture or a lack of sufficient adhesion.

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# Standard Membrane (vertical walls two-sided contact application)

- 1. Apply a smooth, even coat of Aqua Base 120 bonding adhesive to the back side of the membrane and substrate. Do not apply adhesive in area of seam laps.
- 2. Coverage rate to be approximately:

240 square feet per gallon for one surface (membrane or substrate only) or 120 square feet per gallon per finished surface (membrane and substrate)

- Allow adhesive to dry until it turns yellow and does not transfer to a dry finger or pull away from the substrate. <u>Aqua Base</u> 120 bonding adhesive will take a longer time to dry. Adhesive must be dry but still tacky (but not string) when the sheet is mated to the vertical surface. Do not allow to over dry.
- 4. Mate surfaces together avoiding wrinkles. Immediately roll the bonded area of the sheet with a 2-inch wide rubber hand roller to promote maximum positive contact between the membrane and the substrate. Overlap all adjacent flashing sheets a minimum of 2 inches. The Heat-Weld Membrane Flashings shall extend a minimum of 6 inches onto the field sheet and be securely adhered. There shall be a minimum 2 inches hot-air weld in front of the fastener plates. All side laps are to overlap a minimum of 2 inches.
- 5. Extended drying times can be expected during cool, overcast, humid, shaded, or late day applications. The adhesive must be dry (but still tacky) before mating surfaces to avoid permanent blisters due to trapped moisture or lack of sufficient adhesion...

### **Precautions**

- 1. Review the applicable Material Safety Data Sheet for complete safety information prior to use.
- 2. Avoid breathing vapors. Keep container closed when not in use. Use with adequate ventilation. If inhaled, remove to fresh air.
- 3. If swallowed, **DO NOT INDUCE VOMITING.** Call a physician immediately.
- 4. Avoid contact with skin. Wash hands thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water.
- 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. Do not thin Aqua Base 120. Thinning will affect performance and may coagulate the adhesive.
- 7. Aqua Base 120 will turn to a yellow cast when completely dry. Dry time is dependent upon ambient conditions.
- 8. Open containers of Aqua Base 120 should be used within 48 hours. Adhesive will form a thick skin in the container that will not dissolve. Remaining adhesive can be used once the skinned layer has been removed.
- Extended drying times can be expected in cool or humid conditions as well as shaded areas. Not allowing the adhesive to properly dry in a two-sided contact adhesive application will result in poor adhesive strength and/or blisters occurring over time.
- 10. Keep out of reach of children.

# **Product Data Sheet**

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# **STORAGE & HANDLING**

DO NOT ALLOW Aqua Base 120 TO FREEZE. Frozen product is un-usable and must be discarded.

Job site storage in excess of 90°F (32°C) may affect product shelf life. Do not store below 40°F.

# 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 <u>www.mulehide.com</u> for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

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