

# DEERY<sup>®</sup> BRAND

PAVEMENT PRESERVATION PRODUCTS

6165 W. Detroit St. • Chandler AZ 85226

1-800-528-8242 • (602) 276-0406 • FAX (480) 961-0513

www.deeryamerican.com

## INSTALLATION INSTRUCTIONS PAVEMENT JOINT ADHESIVE

JANUARY 2008

### READ BEFORE USING THIS PRODUCT

**GENERAL:** Deery Pavement Joint Adhesive is a hot-applied modified asphalt product used to adhere and tack longitudinal cold construction joints between adjacent asphalt concrete pavement mats. It is supplied as a ready to use solid which is removed from the container, heated to application temperature and then applied to the construction joint face prior to placing the adjacent mat.

**MELTING:** Pavement Joint Adhesive must be melted in jacketed double boiler melters with effective agitation that meet Appendix X1.1 of ASTM D6690. Do not use direct fire or air heated machines. Heat transfer oil temperature should not exceed 525°F (274°C). Melters must be capable of safely heating adhesive to 400°F (204°C).

**CAUTION:** Stop agitation when adding product to prevent splashing. Product is heated to between the minimum application temperature of 350°F (177°C) and the maximum heating temperature of 400°F (204°C). Apply product using a pressure feed wand system.

**APPLICATION METHODS:** Pavement Joint Adhesive is best applied using pressure feed wand applicator systems. Joint faces on which Pavement Joint Adhesive is applied should be dry and free from loose material, dust, or other debris which could interfere with adhesion.

**PAVEMENT TEMPERATURES:** For best performance, Pavement Joint Adhesive should be applied when the pavement surface temperature exceeds 40°F (4°C).

**APPLICATION CONFIGURATIONS:** The application configuration for Pavement Joint Adhesive is a band of material applied over the entire face of the longitudinal edge of an asphalt concrete mat where an adjacent mat will be placed. Recommended band thickness is 1/8 inch (3mm). Application is performed with an applicator disk (Part No.27120 or 27162) attached to the end of the wand. Joint Adhesive is pumped from the melter applicator through the wand and onto the joint face. The applicator disk levels adhesive during application. Excesses should not exceed an overlap of more than 2 inches (5cm) at the joint bottom, or 1/2 inch (1.2cm) at the top. Pavement Joint Adhesive should not be used with open graded pavements because of drainage interference. After installation, keep traffic off of the treated joint to reduce pick up.

**ASPHALT CONCRETE PLACEMENT AND COMPACTION:** Following application of Pavement Joint Adhesive, the adjacent asphalt concrete mat is placed. Paving can proceed using normal procedures. Compaction at the joint should occur with the roller positioned on the hot mat with 4 to 8 inches (10-20cm) of the roller overlapping onto the cold mat. The first pass should be made in this manner to obtain compaction at the joint from the hot side to provide greatest density. The pavement should then be compacted using normal rolling patterns. Use of Pavement Joint Adhesive may slightly lower measured joint densities by up to 1 - 2% due to its lower specific gravity compared to asphalt concrete mixes.

**APPLICATION LIFE:** Application life of Pavement Joint Adhesive at application temperatures is approximately 12 to 15 hours. This may be extended by adding fresh product as

quantity in the melter decreases. Adhesive should be agitated while being applied. Adhesive may be reheated to application temperature once. Additional reheating may degrade properties or cause jelling in the melter. When application life has been exceeded, Pavement Joint Adhesive will begin to thicken, become "stringy" and may then gel. If this should occur, it should immediately be removed from the melter and discarded.

**CLEAN OUT:** If the equipment used requires clean out of pumps and plumbing, follow the manufacturer's instructions. If solvent is used, insure that it does not contaminate adhesive due to dilution and flash problems that may occur.

**STORAGE:** Pallets of boxed product are protected with a weather resistant covering. During storage, the protective wrap must be kept on the pallets to prevent boxes from getting wet. If boxes are subjected to moisture, they may lose strength and crush resulting in pallet leaning. If rips in the pallet covering occur during handling, they should be repaired to help maintain packaging integrity. Pallets should be stored on a level surface which is dry and has good drainage. Pallets should not be stacked because crushing of bottom layers may occur. Adhesive material properties are not affected by packaging deterioration.

**SAFETY PRECAUTIONS:** Since this product is heated to elevated temperatures, it is essential that operations be conducted in manners which assure safety of personnel. All associated with use of the material need to be aware of hazards of using hot applied materials and safety precautions. Before use, the crew should read and understand all sections of the product SDS. This sheet which is supplied with each shipment, describes characteristics of the product as well as potential health hazards and precautions for safe handling and use. User should check D.O.T. requirements for transportation of sealant at elevated temperatures above 212°F (100°C).

**HAZARDS ASSOCIATED WITH HOT APPLIED MATERIALS:** Skin contact with hot applied materials causes burns. Additionally, over exposure to fumes may cause respiratory tract irritation, nausea, or headaches. Therefore, appropriate precautions need to be taken to prevent contact with the hot material, and to avoid inhalation of fumes for everyone in the vicinity of the sealing operation. Safety precautions should include: 1. Protective clothing to prevent skin contact with hot material. 2. Care when adding blocks of product to melters to reduce splashing. 3. Careful operation and control of wands or pour pots which are used to apply product. 4. Traffic and pedestrian control measures which meet or exceed MUTCD requirements to prevent access to work areas while product is still in a molten state. 5. Avoidance of material fumes. 6. Proper application configurations with a minimum amount of excesses of material. 7. Appropriate clean up of excessive applications or product spills.

**ADDITIONAL INFORMATION:** Additional information regarding this product is available by contacting your distributor or DEERY Rep. This information includes: 1) Product Data Sheets, 2) Material Safety Data Sheets, 3) Safety Manual, and 4) Performance Reports.