# DURA-FILL® MA 2

#### **Hot-Applied, Flexible Marker Adhesive**

**Description**: *Dura-Fill* MA 2 is a hot-applied, bituminous marker adhesive modified with polymers for superior flexibility. When properly applied, the material provides a strong bond between pavement markers and pavement. It is a single component material formulated with a select asphaltic resin and a homogeneously-mixed mineral filler. *Dura-Fill* MA 2 marker adhesive does not contain ground tire rubber.

**Recommended Uses:** *Dura-Fill* MA 2 is suitable for bonding pavement markers to portland cement, asphaltic concrete, and chip-sealed road surfaces.

**Surface Preparation**: *Dura-Fill* MA 2 can be applied when road surface and marker temperatures are 40 to 160 °F. In order to ensure proper adhesion, pavement must be free of moisture, dust, loose aggregate, and other contaminates. Use oil-free compressed air and heat to clean and dry the pavement immediately prior to application. Pavement markers should be applied to the adhesive immediately to ensure a strong bond.

**Melting and Application**: *Dura-Fill* MA 2 may be melted in a direct-fired unit, a conventional oil-jacketed unit, or an electrically-heated kettle. With the agitator turned off, carefully add a few bags of *Dura-Fill* MA 2 at a time into the kettle, avoiding splash back. After the initial load has reached the recommended pouring temperature, fresh material may be added to the melter as sealant is used. Molten material should be agitated while in the kettle. Melt only the amount of material that will be used during that work day. Purge material remaining in the kettle lines at the end of each sealing operation. Material may be safely reheated and can be applied using a pressure feed wand system or a pour pot.

**Note**: The temperature of heat-transfer oil should not exceed 525 °F. Do not heat *Dura-Fill* MA 2 above its maximum heating temperature or maintain it at that temperature for prolonged periods of time. Overheating could degrade performance properties or cause the material to gel in the equipment. A significant viscosity increase accompanied by stringiness signals the approach of gelation. If this occurs, immediately remove the material from the melter and dispose of it.

For further details read and follow the *Dura-Fill* product safety data sheet (SDS), "Installation Instructions for Direct Fired *Dura-Fill* Products," and "P&T Products' Warranty."

### **Product Specifications**

when tested in accordance with ASTM D 5329, 36, modified 3111 & 4402

Heating Temp.		400 °F max.
Application Temp.		370 to 390 °F
Heating Time		12 hours max.
Penetration	77 °F	30 dmm max.
Flow	158 °F	5.1 mm max.
Softening Point		200 °F min.
Ductility	5 cm/minute	15 cm @ 77 °F
	1 cm/minute	5 cm @39 °F
Low Temperature Flexibility	1" mandrel bend	Pass @ 20 °F
Specific Gravity		Approximately 1.23
Viscosity	375 °F	20 to 60 Poise
Flash Point		550 °F min.



Economical

- Excellent Adhesion
- Quick Set Up

#### Specifications

ASTM D 4280, A1 Type II ASTM D 4383, A1 Type II

## Packaging

Dura-Fill MA 2 is packaged in a poly-bag contained in a 30-pound, high-strength corrugated box. Each pallet contains 75 boxes (2,250 pounds) of product.

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