**PRODUCT DATA SHEET**

**Duraset-2 MMA 4:1 Profile**

**Duraset-3 MMA 4:1 Extrude**

**Introduction**

**HPS-6 Duraset** is part of Ennis Traffic Safety Solution’s High Performance Roadmarking product line. Based on proven methyl methacrylate (MMA) technology, the Duraset line consists of several white and yellow lead free products tailored for specific application methods, various film thicknesses and/or specific multi-component proportioning application equipment. All provide exceptional retroreflectivity and longevity at an attractive cost per useful life. Duraset provides outstanding adhesion to both concrete and asphalt and can be surface applied or inlaid for even greater durability. Optimum retroreflectivity is achieved when the proper reflective media and coating is used. Please consult with your sales representative for the best reflective media/Duraset combination.

**Description**

Duraset-2 and Duraset-3 are “4:1” by volume ratio products designed for extrusion at a thickness of 60 mils or more. Extrusion is normally accomplished by using truck mounted equipment designed to proportion by volume. One part of liquid catalyst, Part B, is blended into 4 parts of Part A methacrylate base, using a static mixer positioned just prior to the extrusion device. These products can be mixed by hand for non-truck application.

Part A of the product contains intermixed glass beads for enhanced long term retroreflectivity and blended in course aggregate for better skid resistance. Duraset-2 and Duraset-3 are used for surface mount long line striping. Duraset-3 may also be used for inlay application.

Duraset-2 material is further designed to be applied using profile forming extrusion devices. The profiles come in the shape of a raised bar at set intervals along and formed simultaneously with the extruded baseline. This base line can be 60 to 120 mils in thickness with the profile protruding at 120 to 500 mils above the road surface. Duraset-2 provides both an audible warning and enhanced wet night delineation. Duraset-2 is not recommended for inlaid application as the viscosity may hinder the ability of the material to flow into the slot.

**Storage Requirements**

Avoid extreme storage temperatures. Keep materials in dry, protected areas, between 40°F – 80°F. Keep out of direct sunlight and protected from open flame. Use within six months of receipt.

**Packaging and Mixing Instructions**

Both A and B components of Duraset-2 and Duraset-3 come packaged at 50 gallons per drum. Both parts
are pumped into separate holding tanks on the application vehicle for automatic 4:1 metering, mixing and dispensing through a flat line or profile forming extrusion device.
Installation

Refer to the “Application Guidelines” for surface preparation and temperature limitations. Refer to the equipment manufacturers instructions for use of the application device, making sure to calibrate and check the calibration of the automatic metering.

Duraset-2 can be profiled using a raised bar design from 120 to 500 mils. Duraset-3 can be applied at 60 to 120 mils. For inlay application, use only Duraset-3. This material with reflective media should be installed no closer than 10 mils to the surface of the substrate. If specifications require applying material above the plane of the road, it is recommended to extend the line width at least 1/16 of an inch beyond the edge of the inlay slot to keep the roadway edge from crumbling.

Long term retroreflectivity is most effective when the proper reflective media is used. Specific reflective types, composition, gradations, % rounds, and coatings have been tested and found to have superior performance when compared to “other” reflective media. The engineer and applicator shall confirm with the MMA manufacturer, which reflective product is currently the most effective.

For best results, reflective media should be dropped on at a rate of 8 to 10 pounds per 100 square feet depending upon type, gradation, and other factors. Please consult with your sales representative for the best reflective media/Duraset combination.

Handling and disposal of Duraset materials are covered in the SDS.

Typical Technical Data

<table>
<thead>
<tr>
<th>TEST</th>
<th>RANGE</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight per gallon, A or B</td>
<td>14 lbs/gal minimum</td>
<td>D1475</td>
</tr>
<tr>
<td>Settling A</td>
<td>6 minimum</td>
<td>D869, 96 hours at 120 °F</td>
</tr>
<tr>
<td>Pot life at 77 °F (mix)</td>
<td>6 minutes minimum</td>
<td>80 cc of Part A, 20 cc of Part B</td>
</tr>
<tr>
<td>No track at 77 °F (mix)</td>
<td>30 minutes max</td>
<td>D711, mixed as above, 60 mils thick</td>
</tr>
<tr>
<td>VOC (mix)</td>
<td>100 g/l maximum</td>
<td>D2205, mixed as above</td>
</tr>
<tr>
<td>Total solids (mix)</td>
<td>99% by weight min</td>
<td>As in VOC above</td>
</tr>
<tr>
<td>Adhesion (mix)</td>
<td>250 psi or substrate failure</td>
<td>D4541, mixed as above, 60 mils thick</td>
</tr>
<tr>
<td>Chemical resistance (mix)</td>
<td>Pass 7 days immersion</td>
<td>Cure 3 days – motor oil, diesel, ATF, salt, anti-freeze</td>
</tr>
</tbody>
</table>

SAFETY DATA SHEET AVAILABLE UPON REQUEST

The Product Data offered herein is, to the best of our knowledge, true and accurate, but all recommendations are made without warning, expressed or implied. Because the conditions of use are beyond our control, neither Ennis Paint, Inc., nor its agents shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product described herein. No person is authorized to make any statement or recommendation not contained in the Product Data Sheet, and any such statement or recommendation, if made, shall not bind the Corporation. Further, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents, and no license under the claims of any patent is either implied or granted.

Ennis Traffic Safety Solutions
5910 N. Central Expressway, Suite 1050
Dallas, Texas 75206
1-800-331-8118

© 2011 Ennis Paint, Inc., All Rights Reserved

www.EnnisTraffic.com