CALIFORNIA DEPARTMENT OF TRANSPORTATION
AUTHORIZATION PROCEDURES AND ACCEPTANCE CRITERIA
FOR TWO-COMPONENT TRAFFIC STRIPING PAINT

The following procedures are required to authorize two component traffic paint suppliers for inclusion on the Authorized Material List (AML). This program is administered by the Office of Roadway Materials Testing, Chemical Testing Branch. Two component traffic paint specification requirements are listed in Section 84-2 of the 2015 Standard Special Provisions and the 2015 Standard Specifications.

Use two-component painted traffic stripes and pavement markings on roadways where (1) light-to-moderate snow plowing is required and (2) abrasion-resistant striping is required.

1. For new materials the manufacturer will provide:
   A. Authorized Material List Submittal Form TL-9502, [http://cefs.dot.ca.gov/jsp/forms.jsp](http://cefs.dot.ca.gov/jsp/forms.jsp)
   B. Material/system data sheet with detailed performance information, properties and installation instructions. Data in this document will indicate that the system will meet the performance acceptance criteria.
   C. Safety Data Sheet.
   D. Send in a quart sample of two component traffic paint, both white and yellow to the Chemical Testing Branch.

2. Performance acceptance criteria:

   The manufacturer shall provide the following information.

   - Mix ratio, by volume or weight
   - Potlife/working time
   - Lead or chromium content, must be less than 20 mg/kg lead and 5 mg/kg chromium
   - No track time, with post applied beads
   - Initial expected retroreflectivity with the two types of post applied beads.
<table>
<thead>
<tr>
<th>Quality Characteristic</th>
<th>Test method</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytime and Nighttime Color, white and yellow</td>
<td>ASTM D 6628</td>
<td>within color box</td>
</tr>
<tr>
<td>Luminance Factor, white, min</td>
<td>ASTM D 6628</td>
<td>80</td>
</tr>
<tr>
<td>Luminance Factor, yellow</td>
<td>ASTM D 6628</td>
<td>42-60</td>
</tr>
<tr>
<td>Yellowness index, Illuminant C, 2° Std Observer, max, white only</td>
<td>ASTM E 313</td>
<td>10</td>
</tr>
<tr>
<td>Yellowness index, after 300 hrs QUV-A exposure (^a), max</td>
<td>ASTM E 313</td>
<td>15</td>
</tr>
<tr>
<td>Color match, yellow, after 300 hrs QUV-A exposure (^a)</td>
<td>ASTM D6628</td>
<td>Within yellow color box</td>
</tr>
<tr>
<td>Adhesion to concrete, 30 mils on a concrete brick, psi, min</td>
<td>ASTM D 4796</td>
<td>300</td>
</tr>
<tr>
<td>Hardness, Shore D, min</td>
<td>ASTM</td>
<td>50</td>
</tr>
</tbody>
</table>

\(^a\) QUV ASTM D 4587, Cycle 2

3. Send the submittal and sample to the Chemical Testing Branch.

**Caltrans Transportation Laboratory**  
**Attention: Lisa Dobeck, Two Component Traffic Paint**  
**5900 Folsom Boulevard**  
**Sacramento, CA 95819**

When the submittal package has been evaluated and reviewed, the Department will notify the manufacturer of the findings. When any discrepancies are resolved to the satisfaction of the Department the material will be placed on the AML.

The authorization of two component traffic paint will expire in 5 years.

The Department reserves the right to sample, test and to remove the product from the AML at any time.

4. Reauthorization:  
Manufacturer should submit its package with current information to the Chemical Testing Branch at least 3 months prior to the listed expiration date.

Contact the Chemical Testing Branch with any questions about this program.  
Lisa Dobeck at 916-227-7291 or lisa.dobeck@dot.ca.gov