

THERMOPLASTIC PAVEMENT MARKINGS

SUPPLEMENTAL SPECIFICATION SS-719-2

2003 STANDARD SPECIFICATIONS

60-YAX-AADA <i>Ecotherm</i> (Yellow Alkyd Lead-Free -Granular Form)	Crown Technology, LLC 35 Industrial Park Drive P.O. Box 789 Woodbury, Georgia 30293 1-800-457-6267
60-YHX-AADA <i>Ecotherm</i> (Yellow Hydrocarbon Lead-Free -Granular Form)	
01-WHX-BADA (White Hydrocarbon-Granular Form) (formerly identified as 12-WHX-BADA)	
01-WAX-BADA White Alkyd	
886078 AR-AK-SX-LF-1 (Yellow Alkyd Lead-Free)	Ennis Traffic Safety Solutions
886079 AR-AK-SX-LF-2 (Yellow Alkyd Lead-Free)	(formerly Ennis Paint, Inc.)
886080 AR-HY-SX-LF-3 (Yellow Hydrocarbon Lead-Free)	P.O. Box 404
886081 AR- HY -SX-LF-4 (Yellow Hydrocarbon Lead-Free)	Ennis, Texas 75120
AR-HY-SX-W-1(886076) - White Hydrocarbon	1-800-331-8118
AR-AK-SX-W-1(886074) - White Alkyd	
3186AYHRR (Yellow Hydrocarbon Lead-Free Ribbon)	SWARCO
3247AYARR (Yellow Alkyd Lead-Free Ribbon)	P.O. Box 89
2903AWHRR-White Hydrocarbon Ribbon	Columbia, Tennessee 38401
2633AWARR - White Alkyd Ribbon	
Solar Smart Alkyd Y1X1206	Dobco
Dobco Solar Smart Alkyd Y1X1206 (Yellow Alkyd Lead-Free)	Sherwin Williams Company Highway Products
Smart Mark Hydrocarbon W2X1256 (White)	P.O. Box 888
Smart Mark Alkyd W1X1256 (White)	Manchester, Georgia 31816
2003 STANDARD SPECIFICATIONS	
01-WHX-BADA (White Hydrocarbon-Granular Form) (formerly identified as 12-WHX-BADA)	Crown Technology, LLC 35 Industrial Park Drive P.O. Box 789 Woodbury, Georgia 30293 1-800-457-6267
01-YHX-AEDA (Yellow Hydrocarbon-Granular Form) (formerly identified as 12-YHX-AEDA)	
01-WAX-BADA White Alkyd	
01-YAX-AEDA Yellow Alkyd	
2903AWHRR-White Hydrocarbon Ribbon	SWARCO
2633AWARR - White Alkyd Ribbon	P.O. Box 89 Columbia, Tennessee 38401
AR-HY-SX-W-1(886076) - White Hydrocarbon	Ennis Traffic Safety Solutions
AR-HY-SX-Y-1(886077) - Yellow Hydrocarbon	(formerly Ennis Paint, Inc.)
AR-AK-SX-W-1(886074) - White Alkyd	P.O. Box 404
AR-AK-SX-Y-1(886075) - Yellow Alkyd	Ennis, Texas 75120 1-800-331-8118

2003 STANDARD SPECIFICATIONS (cont.)

Smart Mark Hydrocarbon W2X1256 & Y2X12E46

Smart Mark Alkyd W1X1256 & Y1X1246

Dobco

Sherwin Williams Company

P.O. Box 888

Manchester, Georgia 31816

1-706-846-2221

HEAT-FUSED, PREFORMED THERMOPLASTIC

Flametape

PREMARK

Flint Trading, Inc.

P.O. Box 160

Thomasville, North Carolina 27360

1-336-475-6600

Method of Documentation for Acceptance: By brand and manufacturer.

Method of Approval for Materials to be added to this Qualified Products List:

All thermoplastic pavement marking material used on Department projects let for contract after June 12, 2008 must meet the requirements of Supplemental Specification SS-719-2. SS-719-2 specifies color requirements for yellow thermoplastic pavement marking material other than that listed below and in AASHTO M 249. Additionally, SS-719-2 requires, "The pigments used for the pavement marking material compound shall not contain any compounds that will exceed the values listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1."

1. Thermoplastic pavement marking material shall meet the requirements of AASHTO M 249. The pigments used for the yellow pavement marking compound shall be heat resistant, silica encapsulated lead chromate yellow and moly oranges, which shall produce a compound meeting the requirements of Fed. 595B color X3538. The yellow marking material shall contain a minimum of 4 percent by weight of the yellow pigment with a minimum lead chromate content of 60 percent.

Heat-fused, pre-formed thermoplastic pavement marking material shall be supplied with a minimum average thickness of 90 mils before application on the roadway surface. Heat-fused, pre-formed thermoplastic pavement marking material when tested without pre-applied surface reflective elements shall meet the requirements of AASHTO M 249 with the exception of the relevant differences due to the material being pre-formed. The material will not be required to meet Specific Gravity, Drying Time, Impact Resistance, Softening Point, Flowability, nor Flowability-Extended Heating as defined in AASHTO M 249.

2. The manufacturer will provide the Materials Division of the Arkansas Highway and Transportation Department (AHTD) with one copy of a certified test report from an independent testing laboratory showing that the Thermoplastic Pavement Marking / Heat-fused, Pre-formed thermoplastic Pavement Marking comply with the current requirements of AHTD's Standard Specifications for HIGHWAY CONSTRUCTION. All certified test reports shall include the manufacturer's name, brand name of the Thermoplastic Pavement Marking, and the date of manufacture.

Thermoplastic Pavement Marking material shall be tested showing compliance with AASHTO M 249.

Heat-fused, Pre-formed thermoplastic Pavement Marking material shall be tested according to AASHTO M 249 with the following modifications. Provisions shall be made in the test method to utilize the material in its pre-formed state when practical, otherwise, the material will be remelted at $218\pm 1^{\circ}\text{C}$ until homogenous. Color, Yellowness Index, and composition characteristics will be tested without pre-applied, top reflective elements. Cracking Resistance at Low Temperature specimens shall be applied to concrete blocks according to the manufacturer's recommendation for highway application.

3. The pavement marking material must be evaluated by the National Transportation Product Evaluation Program (NTPEP). Final results must be furnished to the Department upon completion of NTPEP evaluation. At the end of the NTPEP testing, the performance of the pavement marking material will be evaluated and final approval will be based on its NTPEP performance. All reports shall include the manufacturer's name, address, and product name.

4. The manufacturer shall submit samples and product information, including printed instructions for application.

Thermoplastic Pavement Marking material shall require a minimum of a 50 Lb. bag or block.

Heat-fused, Pre-formed thermoplastic Pavement Marking material shall require three (3) linear feet of material without the pre-applied top elements.

5. If the pavement marking meets the performance criteria, a letter and unsigned certification agreement will be sent to the manufacturer. The product will be placed on the QPL upon receipt of the signed certification agreement.

6. Each container shall be clearly and adequately marked per the requirements of AASHTO M 249 and shall indicate the color, weight, batch or lot number, and type of material.

7. Destination samples will be taken as deemed necessary by the Materials Engineer to assure compliance with specifications.

Failure of these samples either in the laboratory or in field applications is sufficient reason to reconsider acceptance of the material. Suspension of further use and/or removal from the QPL may occur until the Materials Engineer determines that the product is in compliance with applicable specifications and requirements.