

Evaluation Table

PEP ID:	XXXXX
Manufacturer:	Name of Manufacturer
Product Name:	Name of Product

704 Thermoplastic Pavement Marking
 704 Thermoplastic Striping & Markings (White)
 ADOT Specifications: 704
 Responsible Section: Traffic Group

Material Property	Specification/ Test Method	Requirements	Results	Pass/ Fail
Binder, min, %	704-2.02(A) ASTM D4797	20		
Titanium Dioxide, min, %	704-2.02(A)	10		
Titanium Dioxide, details	704-2.02(D)	Shall conform to the requirements of ASTM D476 for Type II (92 percent).		
Reflective Glass Intermix Beads, min, %	704-2.02(A) AASHTO M 247 (Type 1 or Type 3) ASTM D4797	20		
Calcium Carbonate or Equivalent Filler, max, %	704-2.02(A)	30		
Alkyd Binder, details	704-2.02(A)	Shall consist of a mixture of synthetic resins, at least one of which is solid at room temperature, and of high-boiling-point plasticizers.		
Alkyd Binder, details	704-2.02(A)	At least one third of the binder composition and no less than 8 percent by weight of the entire material formulation shall be solid maleic-modified glycerol ester resin or solid maleic-modified pentaerythritol ester resin.		
Alkyd Binder, details	704-2.02(A)	Shall not contain any petroleum-based hydrocarbon resins.		

Material Property	Specification/ Test Method	Requirements	Results	Pass/ Fail
Filler (white calcium carbonate or equivalent), compressive strength, min, psi	704-2.02(C)	5,000		
Color: Daylight Reflectance at 45 degrees - 0 degrees min, %	Test Method Outlined in Section 704-2.03(B)	70		
Color Chip Match	Test Method Outlined in Section 704-2.03(B)	Federal Test Standard: Number 595 Color chip no. 17925		
Softening Point	Test Method Outlined in Section 704-2.03(D) ASTM D36	Softening point of 215 ± 15 °F		
Water Absorption, max, %	704-2.03(E) ASTM D570	0.5		
Specific Gravity	704-2.03(E) AASHTO T 250	1.85 to 2.15		
Impact Resistance, inch-pounds, min	Test Method Outlined in Section 704-2.03(F) AASHTO T 250	10		
Bond Strength, min, psi	Test Method Outlined in Section 704-2.03(G) AASHTO T 250	180		
Abrasion resistance, max loss, grams	Test Method Outlined in Section 704-2.03(H)	0.5		
Cracking Resistance at Low Temperature	Test Method Outlined in Section 704-2.03(I) AASHTO T 250	Shall show no cracks when observed from a distance exceeding 12 inches.		
Flowability, max residue, %	Test Method Outlined in Section 704-2.03(J) AASHTO T 250	18		
Yellowness Index , max	704-2.03(K) 704-2.05(C) ASTM D4960 ASTM E-313	0.12		

Material Property	Specification/ Test Method	Requirements	Results	Pass/ Fail
Flowability (Extended Heating), max residue, %	Test Method Outlined in Section 704-2.03(L) AASHTO T 250	28		
Flash Point, min, °F	704-2.03(M) ASTM D92	475		
Color Stability	Test Method Outlined in Section 704-2.03(P) ASTM G 155, Cycle 1	No Color Change after 500 Hours		