

Evaluation Table

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

705 Preformed Polymer Pavement Marking

705 Preformed Thermoplastic Pavement Marking - Type IV (Permanent) Yellow

ADOT Stored Specification: 705PVMRK, Sections 705-1(E), 705-2.04 and 705-2.06

Responsible Section: Traffic Group

Material Property	Specification/ Test Method	Requirements	Results	Pass / Fail
Composition	705-2.04(A)	Preformed thermoplastic pavement markings shall be a resilient white, yellow, or other color thermoplastic material, composed of an ester-modified resin in conjunction with pigments, binders and glass beads that have been factory-produced as a finished product.		
Thickness, inches (mils), minimum	705-2.04(A)	0.090 (90)		
Binder, % by weight, minimum	705-2.04(B)	18		
Yellow Lead-Free Pigment, % by weight, minimum	705-2.04(B)	1.5		
Reflective Glass Intermix Beads, % by weight	705-2.04(B)	30 - 45		
Color	705-2.04(C)(1) ASTM D6628	Pigments shall conform to standard highway colors.		
Bend Test	705-2.04(C)(2) ASTM D522*	Pass (no cracking occurs in the test specimen)		
Tensile Strength, psi, minimum	705-2.04(C)(3) ASTM D638	150		
Tensile Elongation %, maximum	705-2.04(C)(3) ASTM D638	20		

Bond Test, psi, minimum	705-2.04(C)(4) ASTM D4796	180		
Abrasion Resistance, grams, maximum loss in weight	705-2.04(C)(5) ASTM D4060	0.25		
Skid Resistance, BPN, minimum	705-2.04(C)(6) ASTM E303	45		
Impact Resistance	705-2.04(C)(7) ASTM D256 ASTM D4960	Sample shall not break when an impact energy of at least 1.0 joule is applied.		
Glass Beads, Roundness	705-2.06(B)(1) ASTM D1155	A minimum of 75 percent of the beads shall be waterwhite true spheres free from imperfections of all types including air inclusions, film, scratches, clusters, and surface scoring.		
Glass Beads, Refractive Index, minimum	705-2.06(B)(2) ASTM C1648	1.50 at 25° +/- 5° C		
Glass Beads, Gradation	705-2.06(B)(3) AASHTO M 247	Shall conform to AASHTO M 247 Type 1 and Type 3.		
Glass Beads, Heavy Metal Composition, ppm	705-2.06(B)(4)	Arsenic: < 75 ppm		
		Antimony: < 75 ppm		
		Lead: < 100 ppm		

* ASTM D522 acceptable, but not referenced in 705PVMRK - ADOT test method in 705-2.04(C)(2).