Evaluation Table

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

709 Dual Component Pavement Marking
709 Dual Component Pavement Markings (White)
ADOT Standard Specification: 709
ADOT Stored Specification: 709PGMNT
Responsible Section: Traffic Group

Material Property	Specification/ Test Method	Requirements	Results	Pass/ Fail
Material Type	709-2.01	Shall be a liquid or 100% solids epoxy or other dual component UV-stabilized system, formulated and designed to provide a simple volumetric mixing ratio of the two components (resin and catalyst).		
Compatibility	709-2.01	Shall be suitable for application to old and new asphaltic concrete and Portland cement concrete pavement surfaces.		
White Pigment Titanium Dioxide, % by weight	709PGMNT 709-2.02(A)	18 - 25		
Epoxy Resin, % by weight	709PGMNT 709-2.02(A)	75 - 82		
Epoxide Number	709-2.02(B) ASTM D1652	± 50 of the published manufacturer's standard		
Anime Number	709-2.02(C) ASTM D2074	± 50 if the published manufacturer's standard		
Toxicity	709-2.02(D)	Upon heating to application temperature the material shall not exude fumes which are toxic or injurious to persons or property.		
Adhesion to Concrete	709-2.02(E) ACI Method 503	100% concrete failure at 4,000 psi		
Hardness, Shore D	709-2.02(F) ASTM D2240	70 - 95		
Abrasion Resistance, Wear Index, mg, max	709-2.02(G) ASTM C501	90		
Tensile Strength, psi, min	709-2.02(H) ASTM D638	6,000		

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Material Property	Specification/ Test Method	Requirements	Results	Pass/ Fail
Compressive Strength, psi, min	709-2.02(I) ASTM D695	11,000		
Retroreflectance, mcd, min	709-2.02(J) ASTM E1710	200		
Color	709PGMNT 709-2.02(K) ASTM D6628	Federal Test Standard Number 595B Color Chip No. 37875		
Yellowness Index, 72 hrs., max	709PGMNT 709-2.02(L) ASTM E313 ASTM G154	15		
Yellowness Index, 500 hrs., max	709PGMNT 709-2.02(L) ASTM E313 ASTM G154	27		
Viscosity	709-2.02(M) ASTM D2196 Method A	The viscosity of each component part shall be within 10% of each other at the recommended spray temperature.		
No-Track Time, max	709-2.02(N) ASTM D711	30 minutes at 40 °F		
No-Track Time, max	709-2.02(N) ASTM D711	20 minutes at 70 °F or more		
Curing Time	709-2.02(N)	Epoxy shall be capable of curing at 32 ° F		
Curing Time	709-2.02(N)	Epoxy shall cure within 72hr at 75 ± 2 ° F		
Glass Beads	709-2.03	Shall be colorless, transparent, free from milkiness or excessive air bubbles, and essentially clean form surface scarring or scratching.		
Glass Beads, True Spheres, %, min	709-2.03 ASTM D1155, Procedure A	70		
Glass Beads, Refractive Index, min	709-2.03	1.5		
Glass Beads, Silica Content, %, min	709-2.03	60		

Glass Beads, Gradation, Type A	709-2.03 ASTM D1214	**Sieve No.**	**% Retained**		
		10	0		
		12	0 - 5		
		14	5 - 25		
		16	40 - 80		
		18	10 - 40		
		20	0 - 5		
		Pan	0 - 2		
Glass Beads, Gradation, Type B	709-2.03 ASTM D1214	**Sieve No.**	**% Retained**		
		20	0 - 5		
		30	5 - 25		
		50	30 - 75		
		80	9 - 32		
		100	0 - 5		
		Pan	0 - 2		
Glass Beads, Coating	709-2.03	Shall have a moisture-proof coating and shall be dual-coated with a silane-type adherence coating.			
Glass Beads, Moisture Absorption	709-2.03	Shall display no tendency to absorb moisture in storage and shall remain free of clusters and lumps.			
Glass Beads, Moisture Resistance	709-2.03 708-2.02(C) AASHTO T 346	All glass beads shall have a moisture-proof adhesion enhancing overlay, consisting of a properly formulated material which prevents bead clumping and clogging and promotes proper embedment and adhesion to the applied paint.			
Glass Beads, Heavy Metal Concentration, ppm, max	709-2.03 708-2.02(B)(6) EPA Method 3052 EPA Method 6010B	Arsenic	<75		
		Antimony	<75		
		Lead	<90		