

**971 TRAFFIC MARKING MATERIALS.**  
**(REV 4-13-07) (FA 4-17-07) (1-08)**

SUBARTICLE 971-3.3 (Page 865) is deleted and the following substituted:

**971-3.3 Physical Requirements:** The material shall meet the following criteria:

Property	Test Method	Minimum	Maximum
Density	ASTM D 1475	13.5 ± 1.4 lb/gal	-
Consistency at 77°F	ASTM D 562	80 KU	100 KU
Fineness of Grind	ASTM D 1210	2(HS)	3(HS)
Dry Opacity at 5 mils WFT	Fed Std 141a Method 4121	0.96	-
Bleed Ratio	Fed Spec TT-P-85D	0.95	-
Flexibility	Fed Spec TT-P-115D	Pass	-
Abrasion Resistance	971-3.3.2	Pass	-

**971-3.3.1 Set To Bear Traffic Time:** When applied at the temperatures and thickness specified by Section 710, the material shall set to bear traffic in not more than two minutes.

**971-3.3.2 Abrasion Resistance:** Test four samples per LOT using a Taber Abrader. The paint shall be applied to specimen plates using a drawdown blade having a clearance of 26 mils. Air dry each sample for 30 minutes and bake at 220°F for 18 hours. Clean with a soft brush and weigh each sample. Abrade samples for 1,000 cycles with 500 g weights and CS-10 wheels. Clean the samples with a soft brush and weigh again. The average weight loss for the four plates shall not exceed 50 mg per plate.

**971-3.3.3 Retroreflectivity:** The white and yellow pavement markings shall attain an initial retroreflectance of not less than 300 mcd/lx·m<sup>2</sup> and 250 mcd/lx·m<sup>2</sup>. The retroreflectance of the white and yellow pavement markings at the end of the six month service life shall not be less than 150 mcd/lx·m<sup>2</sup>.

**971-3.4 Packaging and Labeling:** The traffic paint shall be placed in 55 gallon open-end steel drums with a re-usable multi-seal sponge gasket. No more than 50 gallons of material shall be placed in any drum to allow for expansion during transport and storage.

SUBARTICLE 971-4.3 (Pages 866 and 867) is deleted and the following substituted:

**971-4.3 Physical Requirements:** The material shall meet the following criteria:

Property	Test Method	Minimum	Maximum
Density	ASTM D 1475	13.5 ± 0.37 lb/gal	N/A
Consistency at 170°F	ASTM D 562	80 KU	100 KU
Fineness of Grind	ASTM D 1210	2 (HS)	3(HS)
Dry Opacity at 5 mils WFT	Fed Std 141a Method 4121	0.96	-
Bleed Ratio	Fed Spec TT-P-85D	0.95	-
Flexibility	Fed Spec TT-P-115D	Pass	-
Abrasion Resistance	971-4.3.2	Pass	-

**971-4.3.1 Set To Bear Traffic Time:** When applied at the temperatures and thickness specified by Section 710, the material shall set to bear traffic in not more than two minutes.

**971-4.3.2 Abrasion Resistance:** Test four samples per LOT using a Taber Abrader. The paint shall be applied to specimen plates using a drawdown blade having a clearance of 26 mils. Air dry each sample for 30 minutes and bake at 220°F for 18 hours. Clean with a soft brush and weigh each sample. Abrade samples for 1,000 cycles with 1.1 lb weights and CS-10 wheels. Clean the samples with a soft brush and weigh again. The average weight loss for the four plates shall not exceed 0.178 oz per plate.

**971-4.3.3 Retroreflectivity:** The white and yellow pavement markings shall attain an initial retroreflectance of not less than 300 mcd/lx·m<sup>2</sup> and 250 mcd/lx·m<sup>2</sup>, respectively. The retroreflectance of the white and yellow pavement markings at the end of the six month service life shall not be less than 150 mcd/lx·m<sup>2</sup>.

**971-4.4 Application Properties:** Application properties shall meet the requirements of Section 710.

**971-4.5 Packaging and Labeling:** The traffic paint shall be placed in 55 gallon open-end steel drums with a re-usable multi-seal sponge gasket. No more than 50 gallons of material shall be placed in any drum to allow for expansion during transport and storage.

SUBARTICLE 971-9.6 (Pages 874 and 875) is deleted and the following substituted:

**971-9.6 Physical Requirements:** The material shall meet the following criteria:

Property	Test Method	Minimum	Maximum
Dry Opacity *	Fed Std 141a Method 4121	0.96	-
Bleed Ratio	Fed Spec TT-P-85D	0.95	-
Flexibility	Fed Spec TT-P-115D	Pass	-
Abrasion Resistance	971-9.6.2	Pass	-

\*When applied at manufacturer's recommended dry film thickness.

**971-9.6.1 Set To Bear Traffic Time:** When applied at the temperatures and thickness specified, the material shall set to bear traffic in not more than two minutes.

**971-9.6.2 Abrasion Resistance:** Test four samples per LOT using a Taber Abrader. The paint shall be applied to specimen plates using a drawdown blade having a clearance of 26 mils. Air dry each sample for 30 minutes and bake at 220°F for 18 hours. Clean

with a soft brush and weigh each sample. Abrade samples for 1,000 cycles with 1.1 lb weights and CS-10 wheels. Clean the samples with a soft brush and weigh again. The average weight loss for the four plates shall not exceed 0.178 ounce per plate.

**971-9.6.3 Retroreflectivity:** The white and yellow pavement markings shall attain an initial retroreflectance of not less than  $450 \text{ mcd/lx}\cdot\text{m}^2$  and not less than  $350 \text{ mcd/lx}\cdot\text{m}^2$ , respectively. The retroreflectance of the white and yellow pavement markings at the end of the three year service life shall not be less than  $150 \text{ mcd/lx}\cdot\text{m}^2$ .