

INTERNATIONAL TRUCK AND ENGINE CORPORATION		
TMS (TRUCK MATERIAL SPECIFICATION)		NUMBER: TMS- 4505
TITLE: Enamel, Air Dry, Texture Finish		REVISION: C - 1
WRITTEN/EDITED BY: Materials Engineering	APPROVED BY: Materials Engineering	DATE ISSUED: September 2000
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<i>This specification may involve hazardous materials, equipment, and procedures. This specification does not purport to address all of the safety issues associated with its use. The user is responsible to consult appropriate safety and health practices and to determine the applicability of regulatory limits prior to use.</i>		
Change Notice: Reformatted and Editorial		
Reference: File 30-13A	Keywords: Enamel; Air Dry Paint; Texture Paint	

1.0 APPLICATION

This specification covers an air dry vinyl modified, acrylic alkyd paint suitable for achieving a textured finish on fiberglass reinforced plastic parts, as described in TMS-9000.

2.0 SCOPE

This specification covers the property and performance requirements, approved materials and an approved source list.

3.0 REFERENCE DOCUMENTS

Unless otherwise specified, the latest issue of all referenced standards shall apply. The following standards, specifications and regulations are referenced in this specification.

Quality System Standard QS-9000 (ISO 9001)	INTERNATIONAL CEMS GT-2B	FSTM 4250
INTERNATIONAL IQR Quality Standard	INTERNATIONAL CEMS GT-4D	FSTM 4184.1
INTERNATIONAL Mfg. Standard D-13	INTERNATIONAL CEMS GT-5A	ASTM D 56
INTERNATIONAL TMS 9000	INTERNATIONAL CEMS GT-7D	ASTM D 562
CFR Title 29, Part 1910	INTERNATIONAL CEMS GT-7E	
INTERNATIONAL CEMS GT-1	INTERNATIONAL CEMS GT-7G	
INTERNATIONAL CEMS GT-3B		

4.0 REQUIREMENTS

4.1 Liquid Properties

4.1.1 Non-Volatile Content: CEMS GT-1

Percentage by weight. min

<u>Color Code</u>	<u>Weight %</u>
NAV 2300 (Tahitian Red)	41.8 ± 2
NAV 8550 (Gray)	45.6 ± 2
NAV 1622 (Rawhide)	46.8 ± 2
NAV 0006 (Dark Brown)	44.5 ± 2
NAV 9220 (White)	49.6 ± 2

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4.1.2 Weight per Unit Volume: FSTM4184.1

<u>Color</u>	<u>kg/liter</u>	<u>lbm/gallon</u>
NAV 2300	1.08 ± 0.02	9.0 ± 0.2
NAV 8550	1.08 ± 0.02	9.0 ± 0.2
NAV 1622	1.14 ± 0.02	9.5 ± 0.2
NAV 0006	1.09 ± 0.02	9.1 ± 0.2
NAV 9220	1.17 ± 0.02	9.8 ± 0.2

4.1.3 The liquid properties listed in this section apply to all colors.

4.1.3.1 Flash Point: ASTM D-56

Shall be 27°C (81°F) minimum

4.1.3.2 Viscosity, As Received: ASTM D-562

Shall be 70-80 Krb Units (or equivalent)

4.1.3.3 Storage Stability: CEMS GT-3B

Shall meet the appearance requirements of this storage stability test.

4.1.3.4 Dry Film Properties (All Colors)

The following tests shall be performed on panels prepared and painted per TMS-9000. The panels shall be a min of 100 x 100 mm (4 x 4 in) or 100 mm (4 in) diameter cut from production parts.

4.1.3.5 Hiding Power: CEMS GT-2B

Shall require a maximum dry film thickness of 25 µm (1 mil) to completely hide the black and gray Morest chart.

4.1.3.6 Weatherometer (250 Hours)

Shall show no evidence of color change, cracking, or checking.

4.1.3.7 Hardness: CEMS GT-4D

Shall be 2B minimum

4.1.3.8 Curing Properties on Receipt

Shall be tack free after 15 minutes at 21-27°C (70-80°F).

4.1.3.9 Adhesion: CEMS GT-5A

Shall exhibit 90% adhesion after the specified testing.

4.1.3.10 Salt Spray: CEMS GT-7D

Shall exhibit no evidence of blistering and a maximum creepage of 0.8 mm (0.03 in) after 250 hours testing.

4.1.3.11 Humidity: CEMS GT-7E

Shall exhibit no evidence of blistering immediately after removal from the humidity cabinet after 100 hours testing.

4.1.3.12 Water Immersion: CEMS GT-7G

Shall exhibit no blistering or color change after 48 hours testing.

4.2.9 Color: FSTM 4250

Shall meet the requirements of FSTM 4250.

4.2.10 Heat Stability

Panels heated in oven for 30 minutes at 120°C (250°F) shall exhibit no color change.

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