

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

FLUIDS, MARKING - COLORED

ESE-M6B3-A1

ESE-M6B3-A2

1. SCOPE

The materials defined by these specifications are thin, mobile, fast drying staining colors that adhere to metal parts, rubber tubing, etc. without flaking or scaling.

2. APPLICATION

These specifications were released originally for materials to be used in the identification of parts such as:

A1 Piston rings, piston expanders, shock absorber springs, etc.

A2 Rubber tubing and parts associated with the emission system.

3. REQUIREMENTS

Unless otherwise specified on the part drawing, A1 is understood to be specified. Previously designated Type I and Type II now are identified as A1 and A2, respectively.

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.2 COLOR

As specified on engineering drawing.

A1 Green - Dark
White
Orange
Red
Brown
Yellow
Dark Blue
Light Green

Purple
Light Blue
Orange - Red
Gray
Black
Pink
Silver

A2 See Engineering Materials Approved Source List for color code identification.

3.3 SOLIDS

A1

A2

20% max

15% min

Date	Action	Revisions
2002 09 13	Revised	Updated and renumbered
1978 10 31		Metricated and Retyped CE3H-RD782440-E SUPP #13
1963 06 18		Released E75-39

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	A1	A2
3.4 VEHICLE SOLIDS, min	10%	8%
The vehicle shall be a synthetic resin solution.		
3.5 RESISTANCE TESTS		
3.5.1 Scratch Resistance (FLTM BI 106-01, except dry panels for 10 days prior to testing)	No Flaking	No Flaking
3.5.2 Chip Resistance		
As-received parts shall show no chipping and/or flaking which may be detrimental to performance.		
3.5.3 Oil Resistance (FLTM BI 106-01)		
Must pass the scratch resistance requirement after 48 hour immersion at room temperature in SAE 20 engine oil and ESF-M6C30-A shock absorber fluid. Air dry panels for 10 days prior to immersion.		
3.6 STABILITY		
A1	There shall be no settling, livering or curdling of the material after being stored for 30 days in a 3/4 filled sealed container.	
A2	There shall be no livering or curdling of the material after being stored for 30 days in a 3/4 filled sealed container. Some settling permitted which will be readily dispersed upon agitation.	
3.7 TOXICITY		
The material shall not contain any benzol (benzene), aniline oil, or hydrolizable chlorinated hydrocarbons.		
3.8 QUALITY		
The material shall be free from dirt, lumps and skins and be miscible with the recommended thinner.		
3.9 REDUCTION		
Any use of solvents to reduce viscosity for processing shall not affect the intensity of color for identification and/or performance.		