

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

CLEANER, FOAM DEPRESSOR

WSS-M5B408-A

1. SCOPE

This specification defines the requirements of a chemical additive for controlling the amount of foam in the cleaner used in the zinc-manganese phosphate system.

2. APPLICATION

This specification was released originally for foam depressor used in the cleaners. The material must be compatible with the cleaners and other chemicals used in the zinc-manganese phosphate system.

3. REQUIREMENTS

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 MASS SPECTROSCOPY

Ford Motor Company, at its option, may conduct mass spectroscopy and/or other analysis of material/parts supplied to this specification. The analyses established for initial approval shall constitute the reference standard and shall be kept on file at the designated material laboratory. All samples shall produce the same analyses that correspond to the reference standard when tested under the same conditions.

3.3 COMPOSITION

Supplier must maintain the following characteristics to a maximum tolerance of +/- 5 % of the initial sample or as reported with the initial sample. Report all other essential components with the initial sample and maintained as part of the Control Plan as required in para 3.1.

3.3.1 Density, kg/L at 25 °C

Initial Sample
+/- 5 %

3.3.2 Chemical Composition

Major Component

Initial Sample
+/- 5 %

Date	Action	Revisions
2002 08 28	Revised	Updated and renumbered
1998 06 24	Activated	A. Reilly N. Chamberlain

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3.4 RESISTANCE PROPERTIES

3.4.1 Foaming Evaluation

Initial sample
plus 10 %

Perform the following test with zero, 0.25 %, 0.50 % and 1.00 % oil loaded cleaner. (Note: The 10 % variation is not from zero load to any of the percentages but from sample to sample. Heat cleaner solution to maximum recommended usage temperature. Transfer to graduated cylinder. Put stopper in cylinder and invert twice. Vent after each inversion to release air pressure. Violently shake the cylinder using an up and down motion for 12 shakes (once up and once down equals one shake). Immediately place on level surface and measure foam volume from liquid/foam interface to top of foam. Repeat measurements at 30 and 60 s. Add foam depressor to each sample and repeat the testing.

3.4.2 Cleaning Performance

The material defined by this specification with the cleaner must meet the requirements of WSS-M14P18-A.

3.5 MATERIAL COMPATIBILITY

The material must be compatible with all related materials, i.e., electrocoats, sealers, and adhesives. The supplier of this material shall keep abreast of changes in technology of related materials which may affect the compatibility and performance of this product. The supplier shall notify the appropriate Ford Product Materials Engineering Office in writing when incompatibility is anticipated.