



OIL, ENGINE, LUBRICITY ADDITIVE

WSE-M99C116-A

1. SCOPE

This material specification defines the minimum acceptable performance requirements and physical/chemical properties of an engine oil lubricity additive.

2. APPLICATION

This specification was released originally for a material to be applied to rocker arms and fulcrums prior to initial engine startup to allow break-in without causing scoring or scuffing of the rocker fulcrums. This additive will adversely affect the anti-oxidant performance of some motor oils.

3. REQUIREMENTS

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

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

3.1 COMPOSITION

This material will be composed of an oleic acid at a concentration of 20 – 30 % by volume in naphthenic base oil.

3.2 VISCOSITY
(ASTM D445)

At 40 °C 17.0 – 19.0 mm²/s

At 100 °C Report

3.3 DENSITY
(ASTM D4052)

0.85 – 0.95 g/ml

3.4 FLASH POINT
(ASTM D92)

150 °C min

3.5 TOTAL ACID NUMBER
(ASTM D664)

65.0 mg KOH/g max

3.6 SULFUR CONTENT
(ASTM D5453)

Report

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.

Date	Action	Revisions	Rev 04
2012 09 19	Revised	See Summary of Revisions	C E Richardson, NA
2009 11 17	N-STATUS	No known use. No replacement named	D. DiGregorio, NA
1991 02 20	Released	NE01E10000474092	B. Romano



5. SUMMARY OF REVISIONS

2012 09 19

- Re-activated specification
- Modified title and scope and re-numbered requirements
- Modified composition from a nominal 25% concentration by weight
- Increased the viscosity range from 18-18 at 40 °C
- Changed the viscosity at 100 °C from 3-4 mm²/s to report
- Changed density method and requirement values
- Modified total acid number
- Removed pour point requirement
- Changed sulfur content method and requirement from 0.6-0.8% to report

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