

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

LUBRICANT, LIQUID TYPE, ASSEMBLY AID

ESA-M1B6-A2

1. SCOPE

The material defined by this specification is a ready-to-use liquid soap of uniform composition.

2. APPLICATION

This specification was released originally for material used as a rubber lubricant.

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 FORM

Liquid

3.3 pH, max (ASTM E 70)

10.6

3.4 SURFACE TENSION, max (ASTM D 1331)

35 mN/m

3.5 TOTAL SOLIDS (ASTM D 460, Method "A")

0.75 - 2.00 %

3.6 EFFECT ON RUBBER, Volume Increase, max 70 h at 23 +/- 2 °C (on R-515 Natural Rubber)

1.0 %

3.7 SPECIFIC GRAVITY (ASTM D 891, Method C)

0.99 - 1.01

3.8 VISCOSITY, at 37.8 °C (ASTM D 88)

0.7 - 2.0 mm²/s

Date	Action	Revisions
2002 09 11	Revised	Updated and renumbered
1996 08 14	Revised	Revised Title T. Horoszy
1995 11 20	Activated	T. Horoszy

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3.9 CORROSION

Ford Motor Company, at its option may conduct corrosion testing on materials/parts supplied to this specification.

3.10 QUALITY CONFORMANCE REQUIREMENTS

3.10.1 Production Shipment Minimum Test Frequency

Material from each lot (a lot is all the material produced in an average production day not to exceed an eight hour production period). The material shall be tested and certified by the supplier to the balance of acidity to alkalinity by determining that the free fatty acid or free alkaline (KOH) is less than 0.15 %.

3.10.2 Periodic Qualification Test Minimum Test Frequency

Once a year each supplier is required to perform complete qualification testing. The testing may be performed either by a Ford or supplier laboratory and records retained by the supplier for review by the Ford quality control activity.