



GREASE, SYNTHETIC ESTER, FUEL RESISTANT, NLGI 0
GREASE, SYNTHETIC ESTER, FUEL RESISTANT, NLGI 1-2

WSS-M1C253-A
WSS-M1C253-A2

1. SCOPE

The material defined by this specification is a grease consisting of synthetic ester, non-soap thickener and other additives to give the desired characteristics.

2. APPLICATION

This specification was released originally for grease used to prevent corrosion in fuel filler cap locks. It is also suitable for corrosion protection in other lock mechanisms and where noise damping is required on interior and exterior systems.

The material has good resistance to water, fuel and hydrocarbon solvent washout. Use of this material with polymers other than polyoxymethylene (acetal) or polyamide is not recommended.

A: This specification was released originally for grease used to prevent corrosion in fuel filler cap locks. It is also suitable for corrosion protection in other lock mechanisms. The validated material is marketed by Ford Customer Service Division in Europe as part of a Squeak & Rattle Repair Kit, Part No. 5U7J 000A94 AA. Operating temperature range -40 °C to 200 °C.

A2: This specification was released originally for grease used to lubricated and prevent corrosion in window regulators, latches, catches and hinges. It is also suitable for lubrication and corrosion protection in similar mechanisms. Operating temperature range -40 °C to 200 °C (-15 °C to 200 °C dynamic).

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 COLOR Translucent
(Visual)

3.2 WORKED PENETRATION, tenths of a millimeter A 355 - 385
(ASTM D 217, DIN ISO 2137, 60 strokes, 25 °C) A2 290 - 320

3.3 WATER RESISTANCE, WATER WASHOUT 1 max
(ASTM D 1264, DIN 51807 T2, 80 °C)

3.4 CORROSION PROTECTION

3.4.1 Emcor Corrosion 0 max
(ASTM D 6138, DIN 51802, 168hrs)

3.4.2 Copper Corrosion (Copper Strip) 1a max
(ASTM D130, DIN 51811, 24, 100 °C)

Date	Action	Revisions
2011 06 28	Revised	See summary or revisions, paragraph 5
1995 09 29	Activated	



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3.5 FLOW PRESSURE 1400 mbar max
(DIN 51805, -35 °C)

3.6 OIL SEPARATION DURING STORAGE 2.5% max
(ASTM D 1742, DIN 51817 18hr at 40 °C)

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. Grease approved to this specification should have the following typical properties.

4.1 COMPOSITION		A	A2
4.1.1	Base Oil – Synthetic Ester (According to formulation)	96%	92%
4.1.2	Gel Thickener (According to formulation)	4%	7%
4.2 BASE OIL PROPERTIES			
4.2.1	Kinematic Viscosity (ASTM D 445, DIN 51562 T01)		
	Viscosity at 100 °C	120	150 mm ² /s
	Viscosity at 40 °C	1200	1600 mm ² /s
4.2.2	Flash Point (ASTM D 92, DIN ISO 2592)	272 °C	281 °C
4.2.3	Pour Point (ASTM D 97, DIN ISO 3016)	-30 °C	-27 °C
4.3 PENETRATION, tenths of a millimeter (ASTM D 217, ISO 2137)			
4.3.1	Worked Penetration, 60 strokes	359	300
4.3.2	Prolonged Worked Penetration, 100,000 strokes	2%	5%
4.4 DROPPING POINT (ASTM D 2265, DIN ISO 2176)		Infusible	Infusible
4.5 FOUR BALL WELD LOAD (ASTM D 2596, DIN 51350)		4000N	4200N
4.6 INTERFACE COMPATIBILITY			
4.6.1	Chemical Attack to Painted Surfaces (FLTM BJ 126-01)		

Note: Not tested for initial application of this grease. Grease must be tested for chemical attack to painted surfaces for applications that come in contact with paint surfaces, ex. E-coat and powder coat.