



GREASE, LITHIUM BASE, SYNTHETIC

WSS-M1C265-A2

1. SCOPE

The material defined by this specification is a synthetic lubricating grease consisting of a polyalphaolefin base oil (PAO), lithium soap thickener, solid lubricants, and a tackifier to provide good lubrication and added protection against washout by splash water.

2. APPLICATION

This specification was released originally for a grease to be used on interior door hardware (e.g., window tracks, window regulators, etc.) where good lubrication and protection against washout by splash water is required. The lubricant is suitable for operating temperatures between - 40 and + 150 °C.

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	COLOR	White
3.3	WORKED PENETRATION, tenths of a millimeter (ASTM D 217, DIN ISO 2137, 60 strokes)	320 - 360
3.4	DROPPING POINT (ASTM D 566)	195 °C min
3.5	BLEED (FTM-791C, Method 321.3, 24h at 100 °C)	6.0% max
3.6	EVAPORATION (ASTM D 972, 24h at 100 °C)	1.0% max

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

4.1	BASE OIL VISCOSITY (ASTM D 445, DIN 51562, ISO 3164, 40 °C)	1640 mm ² /sec
4.2	LOAD-CARRYING CAPACITY, WEAR PROTECTION AND SERVICE LIFE	
4.2.1	Four-ball Wear, scar dia., (ASTM D 2266, DIN 51350 T 5, 1200 RPM, 75 °C, 40kg, 1h)	0.7 mm
4.2.2	Four-ball EP, weld load (ASTM D 2783, DIN 51350 T 4)	150 kg

Date	Action	Revisions
2010 12 02	Revised	See Summary of Revisions
2004 02 09	Activated	





4.2.3	Water Spray-Off, (ASTM D 4049, 5 min at 38 °C)	35.0% max
4.2.4	Oxidation Stability (ASTM D 942, pressure drop in 100h at 99 °C)	9.7 kPa max
4.3	CORROSION PROTECTION (ASTM D 4048, 24h at 100 °C)	1a
4.4	LOW TEMPERATURE TORQUE (ASTM D 1478 or IP 186, - 30 °C)	
	starting	2850 gf-cm
	running	1140 gf-cm
	(ASTM D 1478 or IP 186, - 40 °C)	
	starting	6400 gf-cm
	running	2650 gf-cm
4.5	INTERFACE COMPATIBILITY	
	Production representative materials specific to the application should be used for the following tests.	
4.5.1	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.	
4.5.2	Resistance to Stress Cracking (FLTM BO 127-03)	
	Note: Not tested for initial application of this grease. Grease must be tested for resistance to stress cracking when used for additional applications that come in contact with polymers such as PC, ABS, PC+ABS, ASA or acrylic.	
4.5.3	Elastomer Compatibility (ASTM D 4289, 70 h, 100 C, DIN 53505, DIN 53504)	
	Volume change	Hardness change, max
	Tensile Strength change	
	Note: Not tested for initial application of this grease. Grease must be tested for elastomer compatibility when used for additional applications that come in contact with elastomers. Application specific elastomer should be used for testing instead of a reference elastomer.	

5. SUMMARY OF REVISIONS

2010 12 02

- Lot certification tests moved to requirements.
- Added information on interface compatibility which are requirements in WSS-M13P15-A.