



# MOLUB-ALLOY® 823 FM GREASES

## Product Data Sheet

Molub-Alloy 823 FM Greases were developed for general lubrication of food machinery operating in a wide range of temperatures. These FM Greases have been reviewed by the US Department of Agriculture and authorized for use under USDA Inspection and Grading Programs as Code H1 Lubricants, suitable for use where incidental contact with food is possible.

The base fluid, a U.S.P. White Petroleum Oil, and all other ingredients used in 823 FM Greases comply with sections 178.3570 and 178.3620 of the Federal Food, Drug and Cosmetic Act Regulations.

### DESCRIPTION

A select base oil blend plus an FDA-approved, aluminum complex thickener provide good adhesion, film strength, and water-wash resistance even at elevated temperatures. Drip-free characteristics and the off-white color of Molub-Alloy 823 FM Greases complement housekeeping efforts in food and kindred industries.

A high performance combination of food grade additives provides excellent antiwear protection. The combination of additives and blending techniques maximize rust and oxidation characteristics for effective rust protection and long service life of the grease.

Molub-Alloy 823-0, 823-1, and 823-2 FM Greases meet NLGI Consistency Grades No. 0, No. 1, and No. 2 respectively.

### APPLICATIONS

Molub-Alloy 823 FM were developed to lubricate food machinery in elevated temperature applications where incidental contact is possible.

823 is recommended for sleeve and antifriction bearings in overhead conveyors and other material handling equipment.

823 FM Greases may be applied manually or with automatic dispensing equipment.

Lighter consistency 823-0 FM Grease can be used in gear cases where a non-channeling slump grease is needed to control leakage.

### ADVANTAGES

Molub-Alloy 823 FM Greases are H1 lubricants acceptable for use where incidental contact with food is possible.

Very high melting point and non-drip characteristics of this grease minimize product contamination.

Unique water resistance provides continuous protection even when equipment is washed down periodically.

### NOTES

**Not** compatible with any other type of grease at temperatures above 121°C/250°F. Do **not** extend lubrication cycles until previous lubricant has been purged.

May be exposed briefly to very high temperatures without dripping. However, 823 includes petroleum fluid components which should **not** be exposed to prolonged high temperatures. Replenish **before** the grease stiffens.

For specific terms, conditions, warranty and availability, refer to Castrol Performance Lubricants' Price List in effect at time of purchase.

Please See Reverse Side For Typical Properties.

PDS 662-9 6/97

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*Tribol®*

*Molub-Alloy® Optimol®*

**TYPICAL PROPERTIES****Molub-Alloy 823 FM Greases**

	<b>823-0</b>	<b>823-1</b>	<b>823-2</b>
NLGI Grade	0	1	2
Worked Penetration, ASTM D 217, mm/10	355-385	310-340	265-295
USDA Code	H1	H1	H1
Thickener Type	Aluminum Complex	Aluminum Complex	Aluminum Complex
Dropping Point, ASTM D 566, °C/°F	N/A	260+/500+	260+/500+
Base Fluid Properties			
Viscosity, D 445, D 2161:			
@ 40°C,cSt	143	164	164
@ 100°C,cSt	16.3	21	21
@ 100°F,cSt/SUS	160.8/750	182.3/850	182.3/850
@ 210°F,cSt/SUS	16.8/85	21.5/105	21.5/105
Flash Point, ASTM D 92, °C/°F	216/420	216/420	216/420
Oxidation Stability, ASTM D 942:			
Pressure drop @ 100 hrs, kPa/psi	35/5	35/5	35/5
Emcor Rust Test, DIN 51802, IP 220/85, rating	Pass	Pass	Pass
Water Washout, ASTM D 1264:			
@ 79°C/175°F, % loss	-	5	5
Roll Stability, ASTM D 1831, % change	10	10	5
Four Ball Wear Test (40 kg, 75°C/167°F, 1800 rpm, 1 hr)			
Scar Diameter, mm	0.7	0.7	0.7
Molub-Alloy Solids, Grade Classification	Food Machinery	Food Machinery	Food Machinery

Subject to usual manufacturing tolerances.