



## Optileb™ GR 823 Range

Food Machinery Greases

### Description

Castrol Optileb™GR 823 greases (previously called Molub-Alloy Foodproof 823 FM) were developed for general lubrication of food machinery. They have been approved as "physiologically safe" by the Landesgewerbe-Anstalt LGA Bayern.

Optileb GR 823 greases have also been approved by the U.S. Department of Agriculture (NSF) as "H1" lubricants which can be used in the food and beverage industry even if incidental contact with food products is possible.

- A select base oil blend plus an FDA approved thickener provide good adhesion, film strength and water-wash resistance even at elevated temperatures. Drip-free characteristics and the off-white color of Optileb GR 823 greases complement house keeping efforts in food and related industries.
- A high performance combination of food grade additives provides excellent anti-wear protection. The combination of additives and blending techniques maximize rust and oxidation characteristics for effective rust protection and long service life of the grease.

### Application

- Developed to lubricate food machinery in high-temperature applications where incidental contact with food is possible.
- They are recommended for sleeve and rolling bearings in overhead conveyors and other material handling equipment.
- May be applied manually or with automatic dispensing equipment.
- Lighter consistency GR 823-0 grease can be used in gear cases where a non-channeling slump grease is needed to control leakage.
- Temperature application range: - 30°C up to – 120°C

### Advantages

- 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.
- Physiologically safe (approved by LGA Bayern) - base fluid and all other ingredients used in GR 823 comply with sections 178.3570 and 178.3620 of the FDA guidelines.

## Typical Characteristics

Name	Method	Units	823-0	823-1	823-2
Thickener type	-	-	Aluminium Complex	Aluminium Complex	Aluminium Complex
Worked Penetration (60 strokes @ 25 °C/77 °F)	ASTM D217/ISO 2137	0.1 mm	355 - 385	310 - 340	265 - 295
Dropping point	ASTM D566/ISO 2176	°C/°F	-	>230/>446	>230/>446
Base Oil Viscosity @ 40 °C/104 °F	ASTM D445/ISO 3104	mm <sup>2</sup> /s	192	192	192
Base Oil Viscosity @ 100 °C/212 °F	ASTM D445/ISO 3104	mm <sup>2</sup> /s	17.5	17.5	17.5
Water Resistance	DIN 51807-1	Rating	0 - 90	0 - 90	0 - 90
FE-9 Bearing Life test - B/1500/6000-120	DIN 51821-2	Pass	Pass	Pass	Pass
Copper Corrosion (24 hrs, 100 °C/212 °F)	ASTM D4048	Rating	1	1	1
Rust Test - EMCOR (distilled water)	ASTM D6138/ISO 11007	Rating	0/0	0/0	0/0
Roll Stability test - Shear Stability (5 hrs, 70 °C/158 °F)	ASTM D1831 (modified)	Change %	≤ 10	≤ 10	≤ 10
Four Ball Wear test - Wear Scar Diameter	DIN 51350-5D	mm	<0.60	<0.60	<0.60
Flow pressure @ -20 °C/- 4 °F	DIN 51805	hPa	400	<b>700</b>	1400

## Additional Information

- Optileb GR 823 greases should not be mixed with greases using a different thickener. Lubrication intervals should be increased gradually to ensure complete removal of previous lubricant.
- At higher temperatures (above 100°C) relubrication intervals should be established by inspection.

**This product was previously called Molub-Alloy Foodproof 823 FM . The name was changed in 2015**

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