



# **Castrol Molub-Alloy Foodproof 823 FM Range**

Food Machinery Greases

### Description

CASTROL MOLUB-ALLOY<sup>™</sup> FOODPROOF 823 FM greases were developed for general lubrication of food machinery. They have been approved as "physiologically safe" by the Landesgewerbe-Anstalt LGA Bayern.

CASTROL MOLUB-ALLOY FOODPROOF 823 FM 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 CASTROL MOLUB-ALLOY FOODPROOF 823 FM greases complement house keeping efforts in food and kindred 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 823-0 FM 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 823 FM 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)	ISO 2137 / ASTM D217	0.1 mm	355 - 385	310 - 340	265 - 295
Dropping point	ISO 2176 / ASTM D566	°C/°F	-	>230/>446	>230/>446
Base Oil Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm²/s	192	192	192
Base Oil Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm²/s	17.5	17.5	17.5
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	>200/>392	>200/>392	>200/>392
Water Resistance	DIN 51807-1	Rating	0	0	0
FE-9 Bearing Life test - A/ 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)	ISO 11007 / ASTM D6138	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	mBar	<250	<350	550

## **Additional Information**

- 823 FM 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.

Castrol Molub-Alloy Foodproof 823 FM Range 02 Aug 2012

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