

## Product Data

# Castrol Molub-Alloy Foodproof 823 FM

Food machinery greases

## Description

Molub-Alloy™ 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.

Molub-Alloy Foodproof 823 FM greases have been approved by the US Department of Agriculture (NSF) and Australian Quarantine Services (AQIS) as “H1 lubricant” and “Category 10, Lubricant type A” respectively, and 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 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 maximise 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-channelling slump grease is needed to control leakage.
- Temperature application range: -30°C up to -120°C

## Advantages

- H1 lubricants and Category 10, Lubricant type A 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.

## Additional Information

Molub-Alloy Foodproof 823 FM greases are classified as non hazardous according to the criteria of ASCC. It is classified as dangerous goods due to toxicity to aquatic organisms and may cause long term adverse effects in the aquatic environment. It should not be released to the environment under any circumstances.

In line with safe handling practices, it is recommended that the handling instructions outlined in the Castrol Material Safety Data Sheet be followed.

Molub-Alloy Foodproof 823 FM greases classified as a C2 combustible liquid for storage and handling purposes. Store in a cool, dry, well-ventilated area out of direct sunlight. Avoid sparks, flames and other ignition sources. Store away from incompatible materials such as materials that support combustion (oxidising materials). Reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Spillage: SMALL - 20 LITRES OR LESS  
Soak up on Castrol Diatomaceous Earth or similar inert oil absorbent. Arrange for disposal through an approved facility.

LARGE - GREATER THAN 20 LITRES  
Contain as soon as possible, remove by best means available and arrange recycling (preferred) or disposal through an approved facility.

Disposal: New or used material must not be allowed to enter the ground, ground water, water courses, sewers or drainage systems. Advice may be sought from the Environmental Protection Authority or from the local waste disposal authority

## Product Characteristics

Property	Method	Unit	Value		
Castrol Molub-Alloy Foodproof 823 FM	-	-	823-0	823-1	823-2
NL GI Class	DIN 51818	-	0	1	2
Thickener	-	-	Aluminium complex		
Worked penetration	DIN ISO 2137	0.1 mm	355 – 385	310 – 340	265 - 295
Dropping point	ISO 2176	°C	-	> 230	> 230
Base oil properties					
Viscosity					
@ + 40°C	DIN 51366	mm <sup>2</sup> /s		192	
@ + 100°C				17.5	
Flash point	ISO 2592	°C		> 200	
Behaviour in the presence of water (90°C)	DIN 51807/1	rating		0	
FAG-FE 9 test (A/1500/6000/120)	DIN 51821-02	-		passed	
Oxidation stability (Pressure drop after 100 h)	DIN 51808	bBar		< 0x2	
Copper corrosion (24 h @ 100°C)	DIN 51811	rating		1	
Emcor test	DIN 51802: IP220/67	rating		0/0	
Roll stability (5 h, 70°C)	ASTM D 1831	change %		≤10	
Four ball wear test, wear scar diameter	DIN 51350-05-D	mm		< 0.60	
Flow pressure @ - 20°C	DIN 51805	mbar	< 250	< 350	<550

## Additional Information contd...

- 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

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