

# COPAL MS 2



Grease



**High temperature extreme pressure complex aluminium grease with molybdenum disulfide.**

## APPLICATIONS

**Multi purpose heavy duty grease**

**Recommendation**

- **COPAL MS 2** is suitable for boundary lubrication at high temperatures and heavy loads. In case of accidental overheating, the presence of molybdenum disulfide will guarantee good lubrication and avoid any jamming or sticking.
- Particularly suitable for a variety of industrial and civil engineering applications that work under severe conditions e.g. heavy loads and high temperatures.
- Always avoid contamination of the grease by dust and/or dirt when applying. Preferably use a pneumatic pump system or cartridges.

## SPECIFICATIONS

- ISO 6743-9: L-XBDEB 2
- DIN 51502: KPF2N-20

## ADVANTAGES

**Multi purpose EP  
No harmful substances  
Pumpability**

- Very good resistance to high loads and repeated shock loadings.
- Excellent thermal stability and reversibility.
- Good behaviour in presence of water.
- Very good adhesion to metals.
- Excellent pumpability due to the grease structure.
- **COPAL MS 2** does not contain lead, or other heavy metals considered harmful to human health and the environment.

TYPICAL CHARACTERISTICS	METHODS	UNITS	COPAL MS 2
Soap/thickener		-	Aluminium complex 2
NLGI grade	ASTM D 217/DIN 51 818	-	2
Color	Visual	-	Anthracite
Appearance	Visual	-	Smooth
Operating temperature range		°C	- 20 to 150
Penetration at 25°C	ASTM D 217/DIN51 818	0.1 mm	265-295
Four ball weld load	DIN 51 350-4	daN	320-340
Anti-rust performance SKF- EMCOR	DIN 51 802/IP220/NFT 60-135/ISO 11007	rating	0-0
Dropping point	IP 396/DIN ISO 2176	°C	>250
Kinematic viscosity of the base oil at 40°C	ASTM D 445/DIN 51 562-1/ISO 3104/IP71	mm <sup>2</sup> /s (cSt)	165

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS  
Industrie & Spécialités  
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COPAL MS 2  
1/1



This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.  
A material safety data sheet conforming to the regulations in use in the E.C. is obtainable via your commercial adviser [www.quick-fds.com](http://www.quick-fds.com).