

Shell Malleus Grease OGM Heavy

Special Purpose Open Gear and Wire Rope Grease

THICKENER	NLGI	TEMP RANGE	BASE OIL VISCOSITY		EP	WATER RESISTANCE	SOLID LUBRICANT
		0 °C	40 °C	100 °C			
Al Complex	0	to	4000	125	✓✓✓	☆☆	✓✓
		+50 °C	mm ² /s	mm ² /s			

Shell Malleus Grease OGM Heavy is primarily designed for use in very heavy applications, and operations under severe conditions, in mining equipments, shovels, draglines and excavators in open cut operations. Open Gear Lubricant for ball mills and kilns.

Malleus OGM Heavy is based upon an Aluminium Complex soap thickener dispersed in a high viscosity, very high quality mineral base oil containing enhanced extreme pressure – antiwear chemistry.

Applications

Typical applications for Malleus OGM Heavy are:

- Open gears on draglines, shovels, excavators, stackers and reclaimers
- Sticks
- Circle Rail and rollers
- Heavily loaded, slow moving antifriction bearings
- Bushings
- Slow moving wire rope

Performance Features

- **Excellent load carrying capacity under severe operation conditions**
Grease contains selected components to ensure excellent resistance to shock and permanent heavy load
- **Very high mechanical and thermal stability**
Grease thickener structure is designed to resist mechanical stress and high temperature
- **Withstanding severe operation conditions**
like dust and dirt contamination, water, changes in temperature

- **Maintain adhesive characteristic over time**

Thanks performing and advanced polymere technology ensuring durable protection. Forms a dark coating on metal surfaces that is adhesive and highly water resistant

- **Low Friction**
Selected components ensure low friction characteristics, lower energy consumption and wear reduction
- **Environmental compliance**
Shell Malleus OGM is not formulated to contain chlorinated solvent or lead

Operation Temperatures :

From 0 °C up to +50 °C

Approvals and Recommendations

Shell Malleus OGM Heavy is designed to meet following specifications :
Bucyrus SD 4713
P&H 464 Ver 09, 04-93

Health & Safety

Shell Malleus Grease OGM Heavy is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained. Prolonged or repeated contact with the skin should be avoided.

For further guidance on product Health and Safety refer to the appropriate Shell Product Safety Data Sheet.

Typical Physical Characteristics

Shell Malleus	OGM Heavy
NLGI Consistency	0
Colour	Black
Soap Type	Al Complex
Base Oil (type)	High Quality Mineral
Solid Lubricant	Yes
Base Oil Viscosity @ 40°C cSt 100°C cSt (IP 71/ASTM-D445)	4000 125
Cone Penetration Worked @ 25°C 0.1 mm (IP 50/ASTM-D217)	355 - 385
Dropping Point °C (IP 132/ASTM-D566-76)	190
Four Ball Test Kg (IP 236)	800
Four Ball Wear Scar mm (ASTM D 2266)	Max 0.7
Four Ball Load Wear Index (LWI) Kg (ASTM D 2596)	120
FZG A/2.76/50 (DIN 51354) Load Stage pass	12
Rust Test (ASTM D 1743)	Pass
Copper Strip 3h @ 100°C (ASTM D 4048)	1b

These characteristics are typical of current production. Whilst future production will conform to Shell's specification variations in these characteristics may occur. conform to Shell's specification variations in these characteristics may occur.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative