



SHELL MALLEUS[®] OGM

Solvent free extreme pressure open gear lubricants

Product Description

Shell Malleus OGM Medium and **Shell Malleus OGM Heavy** are formulated specifically to meet the critical requirements of surface mining equipment. **Shell Malleus OGM Medium** and **Shell Malleus OGM Heavy** contain severely hydrotreated base stocks, an advanced polymerized thickener system and use a carefully selected extreme pressure and anti-wear chemistry to help minimize wear rates on critical components operating in extreme, arduous climate conditions. **Shell Malleus OGM Medium** and **Shell Malleus OGM Heavy** were specially formulated for use on open gearing, draglines, shovels, excavatorx, stackers and reclaimers in open cut operations to reduce the adverse affects of severe dust and dirt contamination, water and changes in temperature.

Shell Malleus OGM Medium and **Shell Malleus OGM Heavy** contain a high molecular weight polymer extender that resists drying, oxidation, and thermal decomposition. This is extremely helpful in areas of high dust contamination or when typical weather conditions can cause peeling and "flaking" of conventional lubricants from racks, pinions, sticks, gears, and circle rails.

Shell Malleus OGM Medium and **Shell Malleus OGM Heavy** have a thickener structure that inherently resists emulsification with water and have excellent mechanical and thermal stability. This makes these products ideal for use in bearings and bushings. The low temperature capabilities allow the lubricant film to maintain its adhesive characteristics and durable protection under the most arduous demanding conditions.

Features/Benefits

- excellent antiwear performance helping to protect gears from surface pitting and "stick-slip conditions"
- high load carrying capacity which helps to reduce fling off
- resists emulsification helping to protect gears from corrosion even in rainy conditions
- excellent mechanical and thermal stability
- forms tenacious lubricant film helping to reduce consumption

Approvals and Recommendations

- Bucyrus International - certified listing as open gear lubricant (**Shell Malleus OGM Heavy**)
- Bucyrus International - approved for use in Bucyrus W2000 Walking Dragline OGL Application (**Shell Malleus OGM Heavy**)

Applications

Shell Malleus OGM Medium and **Shell Malleus OGM Heavy** are recommended for a variety of applications on mining draglines, shovels, excavators, stackers, reclaimers, including open gears, sticks, pinions, circle rails and rollers, bearings and bushings.

- lubrication of heavily loaded open gearing particularly those found on draglines, shovels, excavators, stackers and reclaimers.
- static and slow moving wire ropes including those intermittently immersed in salt water.
- one lubricant concept for mining draglines, shovels, stackers, reclaimers and excavators- **one grease for the entire machines greasing requirements.**
- suitable for a wide variety of heavy-duty mining and industrial applications including slow moving heavily loaded bearings.
- low temperature capabilities allow the lubricant film to maintain its adhesive characteristics and durable protection under the most demanding conditions.

Features/Benefits

- excellent physical and mechanical stability
- excellent anti-wear performance
- high load carrying capacity
- water repellent
- excellent corrosion protection
- lead and solvent free

Typical Properties of Shell Malleus OGM Medium and Shell Malleus OGM Heavy			
	Test Method	OGM Medium	OGM Heavy
Product Code			
Drum		5057744	5057707
Pail		5057725	5057706
Color	Visual	Black	Black
Thickener Type		Aluminum Complex	Aluminum Complex
NLGI Grade		0/00	0
Penetration, worked, dmm	D 217	380	380
Dropping Point, °F	D 2265	>450	>480
Density at 15°C	D 1298	1.022	0.979
Base Oil Viscosity cSt at 40°C	D 445	58.5	3300
Flash Point, COC, °F	D 92	>400	>400
Four-Ball EP Weld Load, kgf	D 2596	500	>620
Rust Test	D 1743	Pass	Pass
Low Temp. Pumpability Lincoln Ventmeter 600 psi, °F		-35	15

Copper Strip Corrosion 3 hr at 212 F	D 4048 (Mod.)	1b	1b
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Dispensing

Shell Malleus OGM Heavy is a NLGI 0 it can be applied manually or by conventional centralised automatic lubrication systems at temperatures down to -4°C.

Handling & Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet <http://www.equivashellmsds.com>. If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please call **1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: <http://www.shell-lubricants.com/>.