

# MINING

LUBRICATION GUIDE



## LEGACY

**For over 70 years**, Bel-Ray® products have proven their value, setting the highest standards of quality and performance. A leader in lubrication technology, Bel-Ray has engineered products to provide maximum machine protection, delivering superior value for applications in aerospace, automotive, energy, food, marine, military, mining, motorcycle, OEM, powersports, steel, textile and other industries served by our **Powersports, Automotive, Industrial and Mining Divisions**.

## SUSTAINABILITY

**Environmental Carbon Management (ECM)** reduces the overall carbon footprint with responsible waste management and eco-friendly/partially recycled products, packaging, collateral and more. Look for the ECM logo on all Bel-Ray products!

## VALUE

- More than 70 years' experience
- On-site R&D
- Unrivaled customer support
- Global distribution
- Strategic network of regional offices

## SERVICES

- Lubrication management services
- Lubrication system inspections
- Consumption evaluations
- Routine oil analysis
- Component inspection/failure analysis



**Since 1946**, Bel-Ray® has been the hardest working lubricant company in the business. Using Bel-Ray to lubricate your machinery gives your entire business a boost. We help reduce costs and increase production across a wide range of industries.

Through our Total Lubricant Partnership (TLP), we help you choose the best solutions for your machinery, always matching the right products to the right applications. Bel-Ray Mining Lubricants are formulated for mining machinery; severe applications working in the harshest environments and climates. With Bel-Ray, each moving part is effectively lubricated helping to reduce energy and lubricant consumption and extending part, component and system service life and increasing production output. Lubrication, maintenance and replacement parts related costs are significantly reduced. Downtime is reduced and uptime is increased increasing productivity and reducing cost of ownership.

Bel-Ray products are formulated to exceed OEM specifications and meet the challenges of mining machinery, manufactured in the USA from domestic and imported components, combining the latest technology with the finest raw materials.

**When you can't afford to take any risks,  
Bel-Ray is right for the job.**

## FLEX YOUR OPERATION

As part of our commitment to quality and success, Bel-Ray continually develops new products to better serve your mining and industrial needs. For the most current product selection, please visit [belray.com](http://belray.com).

**Contact Customer Service at**  
+1-317-328-5660 or email  
[customerservice@belray.com](mailto:customerservice@belray.com) for  
information on all Bel-Ray products  
or for your Specialty Applications.





# GREASE

		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Biodegradable Multipurpose Extreme Pressure Grease</b>	56851	301544	NLGI 2				 	
<b>2</b>	<b>Molyube® 3% Moly Extreme Pressure Grease LC</b>	67850 67860 67870	301084 300885 301613	NLGI 0 NLGI 1 NLGI 2					
<b>3</b>	<b>Molyube® 5% Moly Extreme Pressure Grease AC</b>	69360 69520 69480 69500	301750 301753 300886 300936	NLGI 0 NLGI 0 NLGI 1 NLGI 2					
<b>4</b>	<b>Molyube® 5% Moly Extreme Pressure Grease LC</b>	67820 67832	301612 301083	NLGI 1 NLGI 2				 	

**# TOP PERFORMER**

MINERAL   SEMI-SYNTHETIC   SYNTHETIC   BIODEGRADABLE   ECO-FRIENDLY

**Technical Questions?** Visit [belray.com](http://belray.com) and contact our Technical Services department.

## 1 BIODEGRADABLE MULTIPURPOSE EXTREME PRESSURE GREASE

**APPLICATION**

**MULTIPURPOSE GREASE**

A high-performance, Extreme Pressure grease, with >60% biodegradability, for general purpose lubrication. Vegetable oil-based for excellent biodegradability and high renewable content. Excellent water washout resistance and mechanical and thermal stability. Superior load-carrying capabilities as well as outstanding rust, corrosion and wear protection for extended component life. The rate of biodegradation is performed according to ASTM D5864 (OECD 301B Modified Sturm Test). Useful temperature range -10°C to 70°C (14°F to 158°F).

**Thickener:** Organoclay | **Base Oil ISO VG:** 100 (NLGI 2) | **Speed:** Medium

## 2 MOLYLUBE® 3% MOLY EXTREME PRESSURE GREASE LC

**APPLICATION**

**3% MOLY GREASE**

A high-performance, lithium complex grease containing 3% molybdenum disulfide, as required by many off-highway equipment OEMs. Exceptional mechanical and thermal stability, excellent anti-wear and Extreme Pressure properties, unsurpassed rust and corrosion protection and resistance to water. Exceeds all of the multipurpose grease requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the all major OEMs for multipurpose Extreme Pressure greases. Useful temperature range -18°C to 177°C (0°F to 350°F).

**Thickener:** Lithium Complex | **Base Oil ISO VG:** 150 (NLGI 0) 200 (NLGI 1) | **Speed:** Low Medium

## 3 MOLYLUBE® 5% MOLY EXTREME PRESSURE GREASE AC

**APPLICATION**

**5% MOLY GREASE**

A high performance aluminum complex grease fortified with excellent Extreme Pressure and anti-wear properties for maximum wear protection. Contains 5% molybdenum disulfide as required by many off-highway equipment OEMs. Weld Load on 4-Ball EP test performance of 800 plus kg and Load Wear Index of 135 kg. Exceeds all of the multipurpose grease requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the all major OEMs for multipurpose Extreme Pressure greases. Useful temperature range -18°C to 177°C (0°F to 350°F).

**Thickener:** Aluminum Complex | **Base Oil ISO VG:** 46 (NLGI 0) 150 (NLGI 0) 220 (NLGI 1) 220 (NLGI 2) | **Speed:** Low Medium

## 4 MOLYLUBE® 5% MOLY EXTREME PRESSURE GREASE LC

**APPLICATION**

**5% MOLY GREASE**

A high-performance, lithium complex grease fortified with 5% molybdenum disulfide as recommended by many equipment manufacturers. Excellent Extreme Pressure capabilities as well as outstanding mechanical and thermal stability. Unsurpassed rust and corrosion protection and resistance to water. Exceeds all of the multipurpose grease requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the Caterpillar (Bucyrus International) SD4711 and Joy Global P&H 472 standards for multipurpose greases. Useful temperature range -18°C to 177°C (0°F to 350°F).

**Thickener:** Lithium Complex | **Base Oil ISO VG:** 220 (NLGI 1) 460 (NLGI 0) | **Speed:** Low Medium



		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Molyube® 87M Extreme Pressure Grease</b>	20250	301187	NLGI 1					
<b>2</b>	<b>Molyube® Extreme Pressure Grease AC</b>	23220 23240	301201 301696	NLGI 1 NLGI 2					
<b>3</b>	<b>Molyube® Extreme Pressure High-Viscosity Grease</b>	20254 20264	301679 301682	NLGI 1 NLGI 2				 	

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MINERAL   SEMI-SYNTHETIC   SYNTHETIC   BIODEGRADABLE   ECO-FRIENDLY

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## 1 MOLYLUBE® 87M EXTREME PRESSURE GREASE

**APPLICATION**

**MULTIPURPOSE GREASE**

Molyube 87M EP Grease is an aluminum complex multi-purpose grease. It contains Molyube Solids, a Bel-Ray proprietary blend of molybdenum disulfide and select graphite to reduce operating temperature and wear. Molyube 87M EP Grease is designed to extend the service life of machine components in the severe duty applications encountered in mining, quarrying, construction, cement and other heavy industries. Molyube 87M EP Grease is especially effective when used to lubricate the suspension components of heavy-duty equipment such as excavators, dozers, loaders and haul trucks.

Thickener: Aluminum Complex | Base Oil ISO VG: 150 (NLGI 1) | Speed: Low Medium

## 2 MOLYLUBE® EXTREME PRESSURE GREASE AC

**APPLICATION**

**EXTREME PRESSURE GREASE**

A severe-duty, impact-resistant, aluminum complex grease fortified with molybdenum disulfide. Excellent Extreme Pressure capabilities, outstanding mechanical and thermal stability. Exceptional water washout resistance, rust and corrosion protection. Exceeds all of the multipurpose grease requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of all major OEMs for multipurpose Extreme Pressure greases. Useful temperature range -12°C to 177°C (10°F to 350°F).

Thickener: Aluminum Complex | Base Oil ISO VG: 150 (NLGI 0) 220 (NLGI 1) 150/220 (NLGI 1)  
Speed: Low Medium

## 3 MOLYLUBE® EXTREME PRESSURE HIGH-VISCOSITY GREASE

**APPLICATION**

**HIGH-VISCOSITY GREASE**

A high viscosity base oil aluminum complex grease fortified with molybdenum disulfide and Extreme Pressure additives. Excellent mechanical and thermal stability. Highly water resistant. Grade 680-1 is Komatsu approved. Useful temperature range 0°C to 177°C (32°F to 350°F).

Thickener: Aluminum Complex | Base Oil ISO VG: 680 (NLGI 1) 680 (NLGI 2) | Speed: Low Medium





		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Molyube® High Temperature Grease</b>	17830	301184	NLGI 1	👉	👉	👉	S	
<b>2</b>	<b>Molyube® Low-Temperature Multipurpose Grease</b>	46420	301042	NLGI 1	👉	👉	👉	M E	
<b>3</b>	<b>Molyube® Multipurpose Extreme Pressure Grease with Moly</b>	40900 40920	301524 301209	NLGI 1 NLGI 2	👉	👉	👉	M	

## 1 MOLYLUBE® HIGH TEMPERATURE GREASE

**APPLICATION**

**HT**  
HIGH-TEMP GREASE

A synthetic, ester-based high-temperature grease with molybdenum disulfide, designed specifically for extended lubrication cycles in heavily loaded applications. Useful temperature range -18°C to 316°C (0°F to 600°F).

Thickener: Sodium Complex | Base Oil ISO VG: 150/220 (NLGI 1) | Speed: Low **L** Medium **M**

## 2 MOLYLUBE® LOW-TEMPERATURE MULTIPURPOSE GREASE

**APPLICATION**

**LT**  
LOW-TEMP GREASE

An aluminum complex grease fortified with Molyube® Solids. Excellent Extreme Pressure capabilities. Outstanding mechanical and thermal stability. Exceptional water washout resistance, rust and corrosion protection. It has excellent pumpability characteristics for exceptionally cold ambient conditions. Useful temperature range -40°C to 149°C (-40°F to 300°F).

Thickener: Aluminum Complex | Base Oil ISO VG: 46 (NLGI 1) | Speed: Medium **M** High **H**

## 3 MOLYLUBE® MULTIPURPOSE EXTREME PRESSURE GREASE WITH MOLY

**APPLICATION**

**EP**  
EXTREME PRESSURE GREASE

An aluminum complex, multipurpose grease fortified with molybdenum disulfide for effective heavy-duty service. Outstanding mechanical and thermal stability to withstand shock and heavy loading found in severe environments of mining, construction and process industries. Exceptional water washout resistance, rust and corrosion protection. Exhibits good cohesive and adhesive characteristics. Exceeds all of the multipurpose grease requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of all major OEMs for multipurpose Extreme Pressure greases. Useful temperature range -26°C to 177°C (-15°F to 350°F).

Thickener: Aluminum Complex | Base Oil ISO VG: 220 (NLGI 1) | Speed: Low **L** Medium **M**

**# TOP PERFORMER**

**M** MINERAL    **SS** SEMI-SYNTHETIC    **S** SYNTHETIC    **B** BIODEGRADABLE    **E** ECO-FRIENDLY

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		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Termalene® Heavy-Duty Construction Grease</b>	72560	301338	NLGI 2	👉	👉	👉	M	Red
<b>2</b>	<b>Termalene® Multipurpose Extreme Pressure Grease</b>	72420 72440	301765 301091	NLGI 1 NLGI 2	👉	👉	👉	M	Red
<b>3</b>	<b>Waterproof Grease</b>	99540	301293	NLGI 2	👉		👉	M E	Green

## 1 TERMALENE® HEAVY-DUTY CONSTRUCTION GREASE

**APPLICATION**

**HD**  
HEAVY DUTY GREASE

Extremely tacky, red, aluminum complex grease. Excellent load carrying capabilities. Exceptional water resistance. Useful temperature range -9°C to 177°C (15°F to 350°F).

Thickener: Aluminum Complex | Speed: Low **L** Medium **M**

## 2 TERMALENE® MULTIPURPOSE EXTREME PRESSURE GREASE

**APPLICATION**

**M**  
MULTIPURPOSE GREASE

A red, general purpose, aluminum complex grease. Excellent extreme pressure and anti-wear properties provide superior machine protection. Useful temperature range -9°C to 120°C (15°F to 250°F).

Thickener: Aluminum Complex | Speed: Low **L** Medium **M**

## 3 WATERPROOF GREASE

**APPLICATION**

**WP**  
WATERPROOF MULTIPURPOSE GREASE

A very tacky, green, general purpose mixed thickener grease. Fortified with synthetic polymers for superior waterproof properties and rust/corrosion inhibitors, this grease is ideal for wet environments. Useful temperature range -20°C to 177°C (-4°F to 350°F).

Thickener: Al - Ba Complex | Speed: Low **L** Medium **M**



**# TOP PERFORMER**

**M** MINERAL    **SS** SEMI-SYNTHETIC    **S** SYNTHETIC    **B** BIODEGRADABLE    **E** ECO-FRIENDLY

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# GEAR OIL HYDRAULIC & ENGINE

		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
1	100 Gear Oil Extreme Pressure Gear Oil	21420	301692	ISO 150					Red
		21440	301195	ISO 220					
		21470	301196	ISO 320	Water	Water	Water	M	
		21480	301197	ISO 460					
		21500	301198	ISO 680					
		21520	301693	ISO 1000					
2	Heavy-Duty Diesel Engine Oil	61580	301054	SAE 15W-40	Water	Water	Water	M	Yellow
3	Raylene Ashless Multi-Viscosity Hydraulic Oil	71750	300938	46	Water	Water	Water	M E	Green

**# TOP PERFORMER**

M MINERAL   
 SS SEMI-SYNTHETIC   
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 E ECO-FRIENDLY

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## 1

### 100 GEAR OIL EXTREME PRESSURE GEAR OIL

APPLICATION



GENERAL PURPOSE GEAR OIL

An exceptional heavy-duty gear oil formulated for all types of gearing. It provides Extreme Pressure and anti-wear properties. Boasts 100-pound Timken OK Load, FZG 12+ Load Stages and 4500 pound true load value Falex EP Test, excellent demulsibility, and exceeds manufacturers' specifications. Forty-year history of exceptional performance leading to extended component life. Exceeds all of the enclosed gear oil requirement of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of all major mining OEM requirements for enclosed gear oil. ISO VG 320 is approved against the Caterpillar SD4720 standard for electric rope shovels' enclosed gear cases. Grades ISO VG 150, ISO VG 220 are Bosch Rexroth approved.

## 2

### HEAVY-DUTY DIESEL ENGINE OIL

APPLICATION



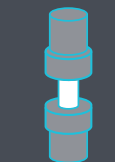
DIESEL ENGINE OIL

An exceptional motor oil formulated for use in diesel and gasoline engines where extended oil drain intervals are desired. Provides superior lubrication performance in heavy-duty diesel or gasoline engine applications commonly found in the mining, transportation and marine industries. API SL/CI-4. An excellent oil for mixed fleet use. TBN 14 base level for extended change intervals.

## 3

### RAYLENE ASHLESS MULTI-VISCOSITY HYDRAULIC OIL

APPLICATION



HYDRAULIC OIL

An premium ashless, zinc-free hydraulic oil designed for high and low pressure hydraulic systems. Exceptional Extreme Pressure and anti-wear properties protect pump and other components in severe operating conditions. Contains foam, corrosion and oxidation-inhibitors. Its high viscosity index and low pour point to ensure excellent fluidity on cold starts. Approved by Racine.






		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Raylene Extreme Pressure Oil</b>	71660	301334	ISO 1000				M E	Orange
<b>2</b>	<b>Raylene Hydraulic Fluid</b>	60160	301784	68				M	Orange
<b>3</b>	<b>Synthetic Gear Oil</b>	66900 66920 66940 66960 66980	301321 301605 301606 301607 301608	ISO 220 ISO 320 ISO 460 ISO 680 ISO 1000				S E	Yellow

## 1 RAYLENE EXTREME PRESSURE OIL

**APPLICATION**




**GENERAL PURPOSE GEAR OIL**

An exceptional heavy-duty gear oil formulated for all types of gearing. Provides Extreme Pressure and anti-wear properties. Boasts a 100 pound Timken OK Load and FZG 12+ Load Stages. Provides micropitting protection. Excellent thermal stability and demulsibility. Does not contain hazardous chemicals such as chlorine, lead, zinc or antimony.

## 2 RAYLENE HYDRAULIC FLUID

**APPLICATION**




**HYDRAULIC OIL**

A mainline anti-wear hydraulic oil that meets the general requirements of industrial hydraulic systems. Also suitable for a broad range of applications including hydraulic and circulating systems, turbines, pumps, bearings, light to moderate duty enclosed gears and general machinery lubrication. Typical 6,000 hour service life. DIN 51 524 (HLP) performance.

## 3 SYNTHETIC GEAR OIL






**APPLICATION**



**GENERAL PURPOSE GEAR OIL**

A full synthetic PAO and ester gear lubricant. Outstanding Extreme Pressure and anti-wear properties, as well as excellent viscosity-temperature properties. Extremely low coefficients of friction and traction. Compatible with mineral oils. Exceeds all of the enclosed gear oil requirement of walking draglines, electric rope shovels and hydraulic excavators. Grades ISO VG 220 thru ISO VG 680 are approved by Flender. Grade ISO VG 460 is approved by Le Tourneau for electric drivers. Grades ISO VG 220 thru ISO VG 460 are approved by Bosch Rexroth. ISO VG 680 is approved by General Electric and Komatsu for wheel motor applications. Grade ISO VG 320 is approved against the Caterpillar SD4720 standard for electric rope shovel enclosed gear cases.

**# TOP PERFORMER**

 MINERAL  
  SEMI-SYNTHETIC  
  SYNTHETIC  
  BIODEGRADABLE  
  ECO-FRIENDLY

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# OPEN GEAR LUBRICANTS

		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
1	Clear Gear Lubricant	21324	301688	Medium Standard Heavy				S E	Yellow
		21325	301193						
		21326	301689						
2	Molyube® Mill Gear Compound	76980	301771	N/A				M	Black
3	Molyube® Mill Gear Grease	76992	301343	Heavy				M E	Grey



TOP PERFORMER

MINERAL  
 SEMI-SYNTHETIC  
 SYNTHETIC  
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 ECO-FRIENDLY

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## 1

### CLEAR GEAR LUBRICANT

APPLICATION



OPEN GEAR OIL

A high-viscosity synthetic hydrocarbon-based open gear lubricant formulated for grinding mill, kiln and other process open gear systems. Provides full fluid film or hydrodynamic lubrication. Completely fluid and freely drains from shrouds and tooth roots. Allows for gear tooth inspections without complete cleaning. Metso Mineral and Outotec approved. Reduces lubricant consumption and gear and pinion temperature. Reduces or eliminates noise and vibration.

## 2

### MOLYLUBE® MILL GEAR COMPOUND

APPLICATION



OPEN GEAR LUBRICANT

A high-viscosity open gear lubricant designed for mill and process open gears. This product forms a strong tenacious paste-like film, providing maximum protection in the load zone greatly reducing consumption. Contains a volatile solvent that ensures fluidity during application. Contains Molyube® Solids. Meets ANSI/AGMA 9005-E02 specification for minimum viscosity recommendations for open gearing intermittent lubricant application and for gravity feed or forced drip lubrication of open gears. Approved by Metso Minerals.

## 3

### MOLYLUBE® MILL GEAR GREASE

APPLICATION



OPEN GEAR LUBRICANT

An aluminum complex, semi-fluid gear lubricant specifically formulated to provide superior lubrication of Type 2 open gear systems. It provides excellent retention characteristics, yet it drains freely from shrouds and tooth roots. Superior Extreme Pressure, anti-wear and anti-rust capability for extended component life while reducing consumption. Contains Molyube® Solids. Heavy Grade - Metso Minerals approved.





		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Molyube® Gear Tac Tacky Open Gear Lubricant</b>	68940	301746	Medium Light					
<b>2</b>	<b>Molyube® SF 100 Semi-Synthetic Open Gear Lubricant</b>	76990 77000 77010 77020 77070 77030	301772 300939 301344 301773 301345 301774	Light Heavy Medium Arctic Sub-Arctic Ultra Heavy					
<b>3</b>	<b>Molyube® Shovel &amp; Dragline Lubricant</b>	70620 70626 70628	301755 301088 301756	Medium Heavy Extra Heavy					
<b>4</b>	<b>Molyube® Ultra Open Gear Lubricant</b>	N/A 78015 78020	500908 301094 301777	High Dust Medium Light Medium					

**# TOP PERFORMER**

MINERAL   SEMI-SYNTHETIC   SYNTHETIC   BIODEGRADABLE   ECO-FRIENDLY

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## 1 MOLYLUBE® GEAR TAC TACKY OPEN GEAR LUBRICANT

APPLICATION

OPEN GEAR LUBRICANT

A high-viscosity paraffinic oil chemically fortified with Molyube® Solids and Extreme Pressure additives. Proprietary polymer technology promotes superior retention properties, minimizing consumption and housekeeping. Maintains lube film in wet conditions. Exceeds all of the open gear lubricant requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the Joy Global P&H 464 standards for open gear lubricants. Can be applied through a centralized system to temperatures as low as -29°C (-20°F).

## 2 MOLYLUBE® SF 100 SEMI-SYNTHETIC OPEN GEAR LUBRICANT

APPLICATION

EXTREME PRESSURE GREASE

A 20+ year standard from the Bel-Ray OGL lineup but still a state-of-the-art lubricant that excels as a multi-service dragline and shovel lubricant. An aluminum complex grease fortified with Molyube® solids in a semi-synthetic base oil. Excellent Extreme Pressure and anti-wear properties. Proven unsurpassed performance in bushings. Exceeds all of the open gear lubricant requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of Joy Global P&H 464 and 520 standards for open gear and multiservice lubricants. Can be applied through a centralized system to temperatures as low as -50°C (-58°F).

## 3 MOLYLUBE® SHOVEL & DRAGLINE LUBRICANT

APPLICATION

OPEN GEAR LUBRICANT

A mineral oil-based, aluminum complex, multi-service lubricant for temperate climates. Perfect for the climates of Africa, Australia, parts of the United States and South America. Contains Molyube® Solids. Provides excellent anti-wear and Extreme Pressure properties. Exceeds all of the open gear lubricant requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the Joy Global P&H 464 standard for open gear lubricants. Can be applied through a centralized system to temperatures as low as -5°C (-23°F).

## 4 MOLYLUBE® ULTRA OPEN GEAR LUBRICANT

APPLICATION

OPEN GEAR LUBRICANT

Current state-of-technology for dragline and electric rope shovel open gear lubrication. Exceeds all current standards for Extreme Pressure and anti-wear with a 1000+ kg Four Ball EP Test Weld Load and a 220+ kg Load Wear Index. Excellent film formation and maintenance capabilities. Exceeds all of the open gear lubricant requirements of walking draglines, electric rope shovels and hydraulic excavators and meets the requirements of the Caterpillar and Joy Global P&H 464 standards for open gear lubricants.

# SPECIALTY

		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>6 in 1<sup>®</sup> Multipurpose Lubricant</b>	12300 12310 (Aerosol)	301179 300873 (Aerosol)	3 3				M E	Yellow
<b>2</b>	<b>Electric Switch Contact Black Grease</b>	54850	301216	100 (Base), NLGI 2				M E	Black
<b>3</b>	<b>Electric Switch Contact White Grease</b>	51100	301532	220/320 (Base), NLGI 2				M E	White
<b>4</b>	<b>High-Temperature Anti-Seize Compound</b>	44500	301526	68 (Base), NLGI 1				S	Brown

# TOP PERFORMER    M MINERAL    SS SEMI-SYNTHETIC    S SYNTHETIC    B BIODEGRADABLE    E ECO-FRIENDLY

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## 1

### 6 IN 1<sup>®</sup> MULTIPURPOSE LUBRICANT

APPLICATION



AEROSOL

A high-performance semi-synthetic multipurpose lubricant. The exceptional lubricating and penetrating properties make the removal of frozen fasteners, rusted bolts and fittings fast and easy. Displaces water, cleans as it lubricates and provides excellent rust protection. USDA H2 rated and is highly recommended for protection of electrical contacts and connections in damp environments.

## 2

### ELECTRIC SWITCH CONTACT BLACK GREASE

APPLICATION



ANTI-SIEZE

Non-melting, anti-seize paste with PTFE and moly for exceptional low frictional properties and load-carrying ability of sliding surfaces and thread applications. Use will result in break-away torque, a positive measure of its effectiveness. Thermal stability prevents seizing, galling, deterioration and minimizes friction for a long and useful life.

## 3

### ELECTRIC SWITCH CONTACT WHITE GREASE

APPLICATION



ANTI-SIEZE

A clean, non-melting anti-seize paste with PTFE for exceptional low frictional properties and load-carrying ability of sliding surfaces and thread applications. Thermal stability prevents seizing, galling, deterioration and minimizes friction for a long and useful life.

## 4

### HIGH-TEMPERATURE ANTI-SIEZE COMPOUND

APPLICATION



ANTI-SIEZE

An outstanding anti-seize and lubricating compound for threaded connections, splines and similar applications where an anti-seize is recommended. Prevents galling, rust, fretting, galvanic pitting, seizure and corrosion. Its unique blend of graphite and copper lubricating solids allows for exceptional performance at both elevated and ambient temperatures. Approximate K-Factor is 0.175 and coefficient of friction is 0.13. Useful temperature range -29°C to 1093°C (-20°F to 2000°F).



		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Kiln Car Grease</b>	45810	300994	32 (Base), NLGI 1					
<b>2</b>	<b>Molyube® Anti-Seize Compound</b>	67710 67700	301610 301082	NLGI 1 NLGI 2					
<b>3</b>	<b>Molyube® Anti-Seize Silicone Compound with Moly</b>	14600	300988	NLGI 2					
<b>4</b>	<b>Molyube® Cam Compound L-56</b>	67760	301611	NLGI 2					

**# TOP PERFORMER**

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## 1 KILN CAR GREASE

APPLICATION

**HT**  
HIGH-TEMP GREASE

A synthetic, high-temperature kiln car lubricating grease containing high-performance graphite capable of lubrication up to 538°C (1000°F).

## 2 MOLYLUBE® ANTI-SEIZE COMPOUND

APPLICATION

**ANTI-SIEZE**

A non-melting, organoclay grease with 40% of molybdenum disulfide and graphite lubricating solids. An outstanding anti-seize and lubricating compound for threaded connections, splines and similar applications where and anti-seize is recommended. Superb rust/corrosion protection. Approximate K-Factor is 0.1 and coefficient of friction is 0.13.

## 3 MOLYLUBE® ANTI-SEIZE SILICONE COMPOUND WITH MOLY

APPLICATION

**ANTI-SIEZE**

Molyube Anti-Seize Silicone Compound with Moly, commonly known as Bel-Ray Molyube 16 Silicone, is an anti-seize compound containing a high percentage of molybdenum disulfide. The base fluid is silicone, which offers excellent high- and low-temperature characteristics

## 4 MOLYLUBE® CAM COMPOUND L-56

APPLICATION

**ROLLING WALK LUBRICANT**

A product formulated to exceed the lubrication requirements of the rolling cam walking system commonly seen on Caterpillar (Bucyrus) walking draglines. A proprietary blend of lubricating solids, EP and anti-wear additive ensure excellent film formation, cam and rail separation and temperature reduction. Low friction properties eliminates vibration and stick-slip. Can be pumped to temperatures as low as -34°C (-30°F) without heat.



		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Molylube® Copper Tool Joint Compound</b>	21020	301190	NLGI 1					
<b>2</b>	<b>Non-Melt Wire Rope Coating Grease</b>	40060	301206	3					
<b>3</b>	<b>Semi-Fluid Grease</b>	43520	301206	N/A					
<b>4</b>	<b>Slide &amp; Cam Lubricant</b>	64310 64330	301595 301596	Medium Light					

**# TOP PERFORMER**

MINERAL   SEMI-SYNTHETIC   SYNTHETIC   BIODEGRADABLE   ECO-FRIENDLY

**Technical Questions?** Visit [belray.com](http://belray.com) and contact our Technical Services department.

## 1 MOLYLUBE® COPPER TOOL JOINT COMPOUND

**APPLICATION**




**ANTI-SIEZE**

A brushable, aluminum complex grease formulated to lubricate threaded drill pipe connections at 'make-up.' Its adhesive property ensures that the product stays in application during all phases of the drilling operation. Absence of lead, antimony or other heavy metals creates low environmental impact. Excellent rust-prevention properties. Lubricating solids prevent seizing and galling, ensuring easy assembly and disassembly. Resists shrinkage and contains a hydrogen-sulfide scavenger. Approximate K-Factor is 0.1 and coefficient of friction is 0.12.

## 2 NON-MELT WIRE ROPE COATING GREASE

**APPLICATION**




**WIRE ROPE GREASE**

A non-melting grease that is formulated for optimum water resistance, adhesion, mechanical stability, corrosion and oxidation resistance. Forms a barrier film protecting and sealing the rope. Passes the EPA Static Sheen Test. Can be manually applied or with all Clamp-type pressurized lubricators.

## 3 SEMI-FLUID GREASE

**APPLICATION**




**SPECIALTY GEAR OIL**

A semi-fluid aluminum complex lubricant that provides superior water repellence and heat resistance while remaining stable to protect against severe shock loads. For use in semi-enclosed or leaky gear cases. This lubricant is rheopectic (shear thickening) to control leakage. Exceptional Extreme Pressure properties.

## 4 SLIDE & CAM LUBRICANT

**APPLICATION**




**DRAGLINE CAM & SLIDE**


A product specifically formulated to exceed the requirements of Bucyrus 2500W Series dragline cam and slide propel mechanism. Its exceptional Extreme Pressure and low friction properties provide protection for plain bearings and sliding surfaces while reducing metal-to-metal contact and minimizing component wear under the most severe operating conditions, thereby extending component life. Its unique mechanical stability maintains the necessary viscosity even under high-load and high-shear conditions.



# 1 SYNTHETIC CHAIN LUBRICANT

**APPLICATION**  
 A superb synthetic ester chain lubricant designed for Extreme Pressure and high temperature applications. Useful temperature range -23°C (-10°F) to 204°C (400°F).  
**CHAIN LUBRICANT**


# 2 SYNTHETIC ESTER COMPRESSOR OIL
























**APPLICATION**  
 A high performance, ester-based compressor lubricant. Excellent water separation and anti-wear properties. Low residue formation and high solvency eliminate deposits. Suitable for rotary screw and vane and reciprocating units.  
**COMPRESSOR LUBRICANT**

# 3 WATERPROOF CHAIN LUBRICANT

**APPLICATION**  
 A heavy-duty, long-lasting lubricant for chains especially in wet environments. Exceptional Extreme Pressure and anti-wear properties protect chain components in the severest service. Available in bulk and Aerosol.  
**AEROSOL**

# 4 WIRE ROPE LUBRICANT

**APPLICATION**  
 A specially formulated penetrating lubricant for wire ropes. Can be applied directly onto wet ropes while providing excellent adhesive properties, reducing consumption. Prevents inner strand corrosion and rubbing wear. It is an all-season product that does not require change of grades as temperatures fluctuate. Applicable manually or through most automatic lube systems. Useful temperature range -46°C to 60°C (-50°F to 140°F).  
**WIRE ROPE GREASE**

		Legacy Product Number	New SAP Product Number	Product Grade	Anti-Wear	Extreme Pressure	Rust, Corrosion & Water Resistant	Product Type	Color
<b>1</b>	<b>Synthetic Chain Lubricant</b>	58750	301232	220				 	
<b>2</b>	<b>Synthetic Ester Compressor Oil</b>	58150 58160	301226 301227	46 68				 	
<b>3</b>	<b>Waterproof Chain Lubricant</b>	66410	300883	680				 	
<b>4</b>	<b>Wire Rope Lubricant</b>	66680 (High Viscosity) 66700 (Low Viscosity)	301602 301603	N/A				 	

**# TOP PERFORMER**  
 MINERAL     SEMI-SYNTHETIC     SYNTHETIC     BIODEGRADABLE     ECO-FRIENDLY  
**Technical Questions?** Visit [belray.com](http://belray.com) and contact our Technical Services department.

PRODUCT GRADE	AVAILABLE PACKAGING			PAGE #
<b>100 GEAR OIL EXTREME PRESSURE GEAR OIL</b>				
ISO 150	Drum	301692150007		13
ISO 220	264 Gal Tote	301195150340	Drum 301195150007	13
ISO 320	Drum	301196150007		13
ISO 460	Drum	301197150007		13
ISO 680	264 Gal Tote	301198150340	Drum 301198150007	13
ISO 1000	264 Gal Tote	301693150340	Drum 301693150007	13
<b>6 IN 1® MULTIPURPOSE LUBRICANT</b>				
3	Drum	301179150007	Aerosol 300873150285	21
<b>BIODEGRADABLE MULTIPURPOSE EXTREME PRESSURE GREASE</b>				
NLGI 2	Keg	301544150014		5
<b>CLEAR GEAR LUBRICANT</b>				
Medium	Drum	301688150002		17
Standard	Drum	301193150002		17
Heavy	Drum	301689150002		17
<b>ELECTRIC SWITCH CONTACT BLACK GREASE</b>				
NLGI 2	Pail	301216150025		21
<b>ELECTRIC SWITCH CONTACT WHITE GREASE</b>				
NLGI 2	Pail	301532150025	Keg 301532150013	21
<b>HEAVY-DUTY DIESEL ENGINE OIL</b>				
SAE 15W-40	Drum	301054150007		13
<b>HIGH TEMPERATURE ANTI-SEIZE COMPOUND</b>				
NLGI 1	Pail	301526150025		21
<b>KILN CAR GREASE</b>				
NLGI 1	Drum	300994150002		23
<b>MOLYLUBE® 3% MOLY EXTREME PRESSURE GREASE LC</b>				
NLGI 0	Flexi-Bag Tote	301084150526		5
NLGI 1	Flexi-Bag Tote	300885150526	Lined Drum 300885150004	5
NLGI 2	Lined Drum	301613150004		5
<b>MOLYLUBE® 5% MOLY EXTREME PRESSURE GREASE AC</b>				
NLGI 0	Flexi-Bag Tote	301753150526	Spacekraft Tote 301750150335 Lined Drum 301753150004	5
NLGI 1	3000 lb Tote	300886150330	Flexi-Bag Tote 300886150526 Lined Drum 300886150004	5
NLGI 2	Drum	300936150002		5
<b>MOLYLUBE® 5% MOLY EXTREME PRESSURE GREASE LC</b>				
NLGI 1	Flexi-Bag Tote	301612150526		5
NLGI 2	Flexi-Bag Tote	301083150526		5
<b>MOLYLUBE® 87M EXTREME PRESSURE GREASE</b>				
NLGI 0	Lined Drum	301187150004		7

<b>MOLYLUBE® ANTI-SEIZE COMPOUND</b>				
NLGI 1	Pail	301610150025		23
NLGI 2	Pail	301082150025	Caulking Cartridge 301082150251	23
<b>MOLYLUBE® ANTI-SEIZE SILICONE COMPOUND WITH MOLY</b>				
NLGI 2	10 oz Brush Top	300988150260		23
<b>MOLYLUBE® CAM COMPOUND L-56</b>				
NLGI 2	Drum	301611150002		23
<b>MOLYLUBE® COPPER TOOL JOINT COMPOUND</b>				
NLGI 1	Pail	301190150025		25
<b>MOLYLUBE® EXTREME PRESSURE GREASE AC</b>				
NLGI 1	Lined Drum	301201150004		7
NLGI 2	Drum	301696150002	Cartridge 301696150230	7
<b>MOLYLUBE® EXTREME PRESSURE HIGH VISCOSITY GREASE</b>				
NLGI 1	Lined Drum	301679150004		7
NLGI 2	Lined Drum	301682150004		7
<b>MOLYLUBE® HIGH TEMPERATURE GREASE</b>				
NLGI 1	Cartridge	301184150230		9
<b>MOLYLUBE® GEAR TAC TACKY OPEN GEAR LUBRICANT</b>				
Medium Light	Lined Drum	301746150004		19
<b>MOLYLUBE® LOW-TEMPERATURE MULTIPURPOSE GREASE</b>				
NLGI 1	Flexi-Bag Tote	301042150526	Lined Drum 301042150004	9
<b>MOLYLUBE® MILL GEAR COMPOUND</b>				
N/A	Lined Drum	301771150004		17
<b>MOLYLUBE® MILL GEAR GREASE</b>				
Heavy	Drum	301343150002		17
<b>MOLYLUBE® MULTIPURPOSE EXTREME PRESSURE GREASE WITH MOLY</b>				
NLGI 1	Drum	301524150002	Lined Drum 301524150004	9
NLGI 2	Lined Drum	301209150004		9
<b>MOLYLUBE® SF100 SEMI-SYNTHETIC OPEN GEAR LUBRICANT</b>				
Light	3000 lb Tote	301772150325	Flexi-Bag Tote 301772150526 Drum 301772150002 Lined Drum 301772150004	19
Medium	Lined Drum	301344150004	Caulking Cartridge 301344150251	19
Heavy	Drum	300939150002		19
Ultra Heavy	Spacekraft Tote	301774150335	Drum 301774150002	19
Arctic	Flexi-Bag Tote	301773150526	Drum 301773150002	19
Sub-Arctic	Flexi-Bag Tote	301345150526		19
<b>MOLYLUBE® SHOVEL &amp; DRAGLINE LUBRICANT</b>				
Medium	Drum	301755150002		19
Heavy	Spacekraft Tote	301088150335		19
Extra Heavy	Spacekraft Tote	301756150335		19



MOLYLUBE® ULTRA OPEN GEAR LUBRICANT			
High Dust	Lined Drum 500908150004		19
Medium Light	Spacekraft Tote 301094150335	Lined Drum 301094150004	19
Medium	Lined Drum 301777150004		19
NON-MELT WIRE ROPE COATING GREASE			
3	Pail 301206150025		25
RAYLENE ASHLESS MULTI-VISCOSITY HYDRAULIC OIL			
46	264 Gal Tote 300938150340	Drum 300938150007	13
RAYLENE EXTREME PRESSURE OIL			
ISO 1000	Drum 301334150007		15
RAYLENE HYDRAULIC FLUID			
68	5 Gal Tin Can 301784150023		15
SEMI-FLUID GREASE			
N/A	Pail 301212150025		25
SLIDE & CAM LUBRICANT			
Light	Flexi-Bag Tote 301596150526		25
Medium	Flexi-Bag Tote 301595150526		25
SYNTHETIC CHAIN LUBRICANT			
220	Drum 301232150007		27
SYNTHETIC ESTER COMPRESSOR OIL			
46	Pail 301226150025		27
68	Drum 301227150007		27

SYNTHETIC GEAR OIL			
ISO 220	Drum 301321150007		15
ISO 320	264 Gal Tote 301605150340	Drum 301605150007	15
ISO 460	Drum 301606150007		15
ISO 680	264 Gal Tote 301607150340	Drum 301607150007	15
ISO 1000	Drum 301608150007		15
TERMALENE® HEAVY-DUTY CONSTRUCTION GREASE			
NLGI 2	Drum 301338150002	Cartridge 301338150230	11
TERMALENE® MULTIPURPOSE EXTREME PRESSURE GREASE			
NLGI 1	Lined Drum 301765150004		11
NLGI 2	Lined Drum 301091150004	Cartridge 301091150230	11
WATERPROOF CHAIN LUBRICANT			
680	Aerosol 300883150285		27
WATERPROOF GREASE			
NLGI 2	Drum 301293150002	Cartridge 301293150230	16 oz Tub 301293150225
			11
WIRE ROPE LUBRICANT			
High Viscosity	264 Gal Tote 301602150340	Drum 301602150007	27
Low Viscosity	Pail 301603150025		27







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