



# PRODUCT DATA SHEET



## MOLYLUBE<sup>®</sup> SHOVEL AND DRAGLINE LUBRICANT

**Molylube Shovel and Dragline Lubricant** is a solvent-free, multi-service lubricant for use on large mining machinery. **Molylube Shovel and Dragline Lubricant** combines Bel-Ray's aluminum complex grease, lubricating solids and Extreme Pressure technologies to provide a stable and durable lubricant and maximum machine protection. **Molylube Shovel and Dragline Lubricant** is suitable for use on all walking draglines and electric rope shovels. **Molylube Shovel and Dragline Lubricant** meets or exceeds the performance requirements of the Komatsu P&H 464 Version 10.0 Specification for Open Gear Lubricants

### *Applications*

- ◆ Draglines - open gears, plain bearings, rollers and rails, and some propel mechanisms
- ◆ Shovels - open gears, plain bearings, dipper sticks and handles, rollers and rails, and lower works

### *Features and Benefits*

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|---|--|
| ◆ Environmentally friendly                  | Contains no volatiles or toxic heavy metals.   |
| ◆ Multi-service function                    | A single lubricant that can provide superior protection in a wide range of shovel and dragline applications from open gears to plain bearings, rollers and rails and shovel dipper sticks and handles. |
| ◆ Reduced consumption                       | Lubrication costs, including disposal and housekeeping, are reduced.   |
| ◆ Anti-wear and Extreme Pressure properties | Maximizes component useful life helping to reduce replacement-part costs and lost production time.   |
| ◆ Exceptional retention properties          | Stays where it is put and will not be displaced from working surfaces by impact, wiping or water washout.  |

### *General Description*

**Molylube Shovel and Dragline Lubricant** is a mineral oil based, aluminum complex multi-service lubricant for use on draglines, shovels, blasthole drills and other heavy industrial applications. A proprietary Bel-Ray film stabilizer promotes film formation, adhesion and retention. Synergy between the product's chemical system and lubricating solids maximizes machine component protection even under the most severe conditions.

### *Product No. 301755, 301088, 301756*

# MOLYLUBE® SHOVEL AND DRAGLINE LUBRICANT

## TYPICAL PROPERTIES

<u>Product No.</u>	<u>301755</u>	<u>301088</u>	<u>301756</u>
<u>Old Product No.</u>	<u>70620</u>	<u>70626</u>	<u>70628</u>
Bel-Ray Name Grade	Medium	Heavy	Extra Heavy
NLGI Grade	0	0	0
Penetration, unworked (60 strokes), ASTM D217 mm/10	370	370	370
Thickener Type	Aluminum Complex	Aluminum Complex	Aluminum Complex
Viscosity, (Base Fluid), ASTM D445			
@ 40°C, cSt	713	1860	3650
@ 100°C, cSt	41.3	69	118
Viscosity Index (Base Fluid), ASTM D2270	97	90	100
Pumpability, Lincoln Ventmeter, from 1800 psi			
@ room temperature, ~25°C (~77°F), psi	132	100	150
@ -1°C ( 30°F), psi	260	850	1400
@ -18°C ( 0°F), psi	1420	--	--
@ 1000 psi, °C (°F)	-12 (10)	-5 (23)	5 (41)
4-Ball EP Test, ASTM D2596			
Weld Load, kg	>800	>800	>800
Load Wear Index, kg	147	137	132
4-Ball Wear Test, ASTM D2266			
@ 1200 rpm, 40 kg, 1 hr, 75°C	0.52	0.52	0.52
Scar Diameter, mm			
U.S. Steel Mobility Test, flow rate, grams/second			
@ 25°C ( 77°F)	2.54	0.90	0.74
@ -1°C ( 30°F)	0.309	0.04	0.02
@ -18°C ( 0°F)	0.02	--	--
Useful Temperature Range			
°C	-12 to 121	-1 to 121	10 to 121
(°F)	(10 to 250)	(30 to 250)	(50 to 250)
Texture	Tacky	Tacky	Tacky
Color	Black	Black	Black