



# PRODUCT DATA SHEET



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

**Molylube SF 100 Semi-Synthetic Open Gear Lubricant**, commonly known as Molylube SF 100, is an extremely versatile, multi-service and environmentally friendly lubricant. **Molylube SF 100 Semi-Synthetic Open Gear Lubricant** is a semi-synthetic base fluid and aluminum complex thickener. **Molylube SF 100 Semi-Synthetic Open Gear Lubricant** provides excellent Extreme Pressure, anti-wear and rust and corrosion protection under the tough conditions associated with mining and heavy industry. **Molylube SF 100 Semi-Synthetic Open Gear Lubricant** is superior mining lubricant. In field evaluations **Molylube SF 100 Semi-Synthetic Open Gear Lubricant** has been shown to have a cost-of-ownership up to 35% lower than the competition when purchase price, lubricant consumption and component life extension is considered.

### *Applications*

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- ◆ Draglines and shovels – open gears, bushings, plain bearings, rollers and rails, dipper sticks and handles, some propel mechanisms
- ◆ Mills and kilns – open gears
- ◆ Open gear and sliding surface priming lubricant (Grades – Heavy and Extra Heavy)
- ◆ General industrial open gears, pins and bushings and sliding surfaces

### *Features and Benefits*

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|--|--|
| ◆ Multi-service capabilities           | A single lubricant that can provide superior protection in a wide range of shovel and dragline applications from open gears to some walk mechanisms. |
| ◆ Reduced consumption                  | Lower lubrication costs, minimizes clean-up and disposal costs.  |
| ◆ Outstanding anti-wear properties     | Extends component life, greatly reducing operating costs.  |
| ◆ Outstanding mobility and pumpability | A grade to lubricate through the temperature extremes from the Arctic to the Sahara.   |

### *General Description*

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**Molylube SF 100 Semi-Synthetic Open Gear Lubricant** is an extremely versatile, multi-service and environmentally friendly lubricant. **Molylube SF 100 Semi-Synthetic Open Gear Lubricant** is designed for use on draglines, shovels, mills, kilns and many heavy industrial applications.

**Product No. 301345, 301773, 301772, 301344, 300939, 301774, 300940**

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1/2/2018

# MOLYLUBE® SF 100 SEMI-SYNTHETIC OPEN GEAR LUBRICANT

## TYPICAL PROPERTIES

| <u>Product No.</u>   | <u>301345</u>       | <u>301773</u>       | <u>301772</u>       | <u>301344</u>       |
|--|---------------------|---------------------|---------------------|---------------------|
| <u>Old Product No.</u>   | <u>77070</u>        | <u>77020</u>        | <u>76990</u>        | <u>77010</u>        |
| Bel-Ray Name Grade   | Sub-Arctic          | Arctic              | Light               | Medium              |
| Penetration, unworked, ASTM D217<br>mm/10 (pre-dilution)         | 370                 | 370                 | 370                 | 370                 |
| Apparent Viscosity (Brookfield), ASTM D2196<br>@ 25°C (77°F), cP | 11,000              | 20,000              | 20,000              | Solvent<br>Free     |
| Thickener Type   | Aluminum<br>Complex | Aluminum<br>Complex | Aluminum<br>Complex | Aluminum<br>Complex |
| Viscosity (Base Fluid), ASTM D445<br>@ 40°C, cSt                 | 707                 | 707                 | 1860                | 1860                |
| @ 100°C, cSt   | 40                  | 40                  | 77.2                | 77.2                |
| Viscosity, (Base Fluid), ASTM D2161<br>@ 100°F, SUS              | 3821                | 3821                | 10210               | 10210               |
| @ 210°F, SUS   | 188                 | 188                 | 375                 | 375                 |
| Copper Strip Corrosion, ASTM D4048<br>24 hrs @ 100°C, rating     | 1b                  | 1b                  | 1b                  | 1b                  |
| 4-Ball EP Test (Pre-dilution), ASTM D2596<br>Weld Load, kg       | ≥800                | ≥800                | ≥800                | --                  |
| Load Wear Index, kg  | 160                 | 160                 | 160                 | --                  |
| 4-Ball EP Test, ASTM D2596<br>Weld Load, kg                      | --                  | --                  | --                  | ≥800                |
| Load Wear Index, kg  | --                  | --                  | --                  | 160                 |
| Useful Temperature Range<br>°C                                   | -45 to +10          | ≥-35                | ≥-28                | ≥0                  |
| (°F)   | (-49 to +50)        | (≥-31)              | (≥-18)              | (≥32)               |
| Color  | Black               | Black               | Black               | Black               |

# MOLYLUBE® SF 100 SEMI-SYNTHETIC OPEN GEAR LUBRICANT

## TYPICAL PROPERTIES

| <u>Product No.</u>   | <u>300939</u>       | <u>301774</u>       | <u>300940</u>       |
|--|---------------------|---------------------|---------------------|
| <u>Old Product No.</u>   | <u>77000</u>        | <u>77030</u>        | <u>77080</u>        |
| Bel-Ray Name Grade   | Heavy               | Ultra Heavy         | Extra Heavy         |
| Penetration, unworked, ASTM D217<br>mm/10 (pre-dilution)         | 370                 | 420                 | 370                 |
| Apparent Viscosity (Brookfield)<br>ASTM D2196, @ 25°C (77°F), cP | Solvent Free        | 11,000              | Solvent Free        |
| Thickener Type   | Aluminum<br>Complex | Aluminum<br>Complex | Aluminum<br>Complex |
| Viscosity (Base Fluid), ASTM D445<br>@ 40°C, cSt                 | 3675                | 3675                | 5175                |
| @ 100°C, cSt   | 145                 | 145                 | 177                 |
| Viscosity, (Base Fluid), ASTM D2161<br>@ 100°F, SUS              | 20157               | 20157               | 28536               |
| @ 210°F, SUS   | 705                 | 705                 | 863                 |
| Copper Strip Corrosion, ASTM D4048<br>24 hrs @ 100°C, rating     | 1b                  | 1b                  | 1b                  |
| 4-Ball EP Test (Pre-dilution)<br>Weld Load, kg                   | --                  | ≥800                | --                  |
| Load Wear Index, kg  | --                  | 160                 | --                  |
| 4-Ball EP Test, ASTM D2596<br>Weld Load, kg                      | ≥800                | --                  | ≥800                |
| Load Wear Index, kg  | 160                 | --                  | 160                 |
| Useful Temperature Range<br>°C                                   | ≥10                 | ≥-15                | ≥25                 |
| (°F)   | (≥50)               | (≥5)                | (77)                |
| Color  | Black               | Black               | Black               |