TECHNICAL DATA

102 Barton Street, St. Louis, USA

230 SUPREME MOLY SYNTHETIC HEAVY DUTY GREASE

M-230 – Is a finest Multi-Purpose, Tacky, Synthetic blend Extreme pressure Anti wear, Extra Moly Heavy Duty and Severe Service Application Grease.

FEATURES:

M-230 – is represent the state of Art in grease technology, with an exceptional versatile out perform characteristics:

- Extremely resistant to softening at high temperature.
- Excellent anti-wear and extreme pressure High Load carrying properties MOLY
- Excellent Adhesives and Cohesive properties.
- Excellent resistance under dirt, mud and water washout and water spray off..
- Excellent rust and oxidation inhibiting characteristics.
- Excellent oxidation resistance for longer service life.
- Excellent reversibility. This property allows **M-230** to have the ability to retain its grease-like consistency and remain in the bearings during periods of heat, high shock loading, extreme pressure, and severe mechanical action.
- Form a tough film, avoid direct shocking damage.
- A high dropping point and excellent shear and mechanical stability
- Excellent Adhesive properties in order to provide the M-230 with the ability to resist wash out, pound out, splatter or squeeze out during periods of high loads, vibration, shock loading, extreme pressure and severe mechanical action.

PRODUCT INFORMATION:

M-230- is the finest multi-purpose grease blended with high VI severely 100% Pure Paraffin base stocks, blended into these 100% pure paraffin base oils is an aluminium complex, thickener and additional selected additives. Included into this blend of high VI paraffin base stocks, aluminium complex thickener and selected additives is molybdenum disulfide. The MoS2 disulfide gives **M-230** the ability to act as a back-stop lubricant when the grease base is either destroyed or wiped away due to unexpected loads, start-up or other conditions which exceed the capabilities of the grease base's fluid lubrication. This backstop is created by molybdenum disulfide's natural affinity for metal surfaces.

The molybdenum disulfide plates to the metal surface to form a long lasting solid lubricant film. This solid lubricant film will withstand pressures up to 500,000 pounds per square inch, giving the metal surfaces of the bearings the protection they need during periods of high speed, high shock loads and extreme pressure.

FRICTION & HEAT REDUCTION: The reduction in friction results and the ability to act as a "backstop" lubricant results in reduced wear and a reduction in contact area temperature. This in turn leads to increased equipment life, less downtime and extended lubrication cycles.



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RUST & OXIDATION INHIBITION: M-230 Has excellent rust and oxidation inhibiting characteristics, water resistance, shear and mechanical stability and good mechanical and pumpability properties.

ADHESIVENESS & COHESIVENESS: M-230 has excellent Adhesive properties. Because of these excellent adhesive properties, **M-230** will not wash out, pound out, splatter or squeeze out under the heaviest load or vibrations.

WIDE TEMPERATURE RANGE: M-230 has an outstanding wide temperature operating range from -12 C to 260 C and above.

COMPLETELY WATER RESISTANT: M-230 has excellent properties which protect against Water "Wash-out" and prevent contamination by dirt, mud and wet condition, this unique properties make the grease an ideal grease in presence of hot and cold water.

NEUTRALIZE ACIDIC: M-230 Contain unique natural "alkaline reserve" which help to neutralize acidic mixture and other corrosive residues.

RECOMMENDED: All types of heavy duty automotive, construction, mining, farming and industrial equipment that are being used under adverse conditions of excessive pressure, high shock loading, extreme hot and cold temperatures and moisture. **Due to its superior cohesive and adhesive properties Moly Supreme is not recommended for use in passenger car automotive wheel bearing applications.**

TYPICAL SPECIFICATIONS:

| NLGI | #0 | #1 | #2 | #3 |
|--|---------------|-----------|-----------|-----------|
| Type Thickener | Aluminium | Aluminium | Aluminium | Aluminium |
| | Complex | Complex | Complex | Complex |
| Dropping Point F/C (ASTM D-2265) | 500/260 | 500/260 | 500/260 | 500/260 |
| Worked Penetration, 77 F/25 C | 370/385 | 310/340 | 280/295 | 220/250 |
| Rust Test ASTM D-1743 | 1,1,1 | 1,1,1 | 1,1,1 | 1,1,1 |
| Water wash-out Test (ASTM D-1264) % | | 6% | 5.5% | 5.5% |
| Loss 175 F/79 C | | | | |
| Oxidation Stability Psi loss at 100 hr | 1 | 1 | 1 | 1 |
| Timken Ok Load ASTM D-2509, failure | 60 lb | 65 lb | 65 lb | 65 lb |
| load, lbs | | | | |
| Four Ball Wear Test, Scan Diameter, mm | 0.6 mm | .63mm | .63mm | .63mm |
| ASTM D-2266 | | | | |
| Four Ball EP Test, ASTM D-2596, Load | 55.2 | 47.82 | 48.94 | 51.34 |
| wear index (kg) | | | | |
| Base Oil Viscosity | 1167.5-1221.7 | 1198.2 | 1198.2 | 1800 |
| Viscosity SUS 100F (ASTM D-445) | | | | |
| Cst 40 C (ASTM D-445) | 220-250 | 226.17 | 226.17 | 337.94 |
| Cst 100 C (ASTM D-445) | 18.75 – 19.3 | 18.89 | 18.89 | 25.25 |
| Flash point F/C (ASTM D-92) | 485/251 | 518/270 | 518/270 | 540/282 |
| Oil separation (ASTM D-1742) % of oil loss | | 1 | 1 | 1 |
| Appearance | Black | Black | Black | Black |