



# 512M | Armor Plate with Moly-D

### XHP Gear Lubricant

#### **DESCRIPTION:**

A multi-grade gear oil that provides excellent lubrication for both the axle and transmission in summer and winter has long been desired by equipment manufacturers. The great success and public acceptance of multi-grade motor oils has emphasized the need for similar viscosity features in gear oils.

Armor Plate with Moly-D XHP 512M Gear Lubricant is a fully balanced multi-grade gear lubricant which provides superior shear stability and thermal stability, and protects critical drivetrain components at temperatures 100°F. above the operating capability of conventional GL-5 gear lubricants. These gear lubricants suffer no significant viscosity loss even after 50,000 miles of operation in hypoid axles, and wide operating temperature range is provided with its low temperature flow characteristics. 512M far exceeds the performance level most widely demanded by equipment manufacturers.

#### **COMPOSITION:**

The XHP formulation of 512M is based on completely shear stable and thermally stable lubricant components and additive chemistry to give the necessary oxidation stability, rust protection, extreme pressure properties, and controlled chemical activity to meet full scale and laboratory tests required by the MIL-L-2105D specification. This product contains dispersants and anti-oxidants which provide a level of thermal stability and deposit control not found in other GL-5 gear lubricants without sacrificing demulsibility. In addition, it contains a special adhesive/cohesive additive for more positive lubrication and a seal swell agent to condition seals and help reduce leakage.

- Oxidation Inhibitors
- Corrosion Inhibitors
- Rust Inhibitors
- Anti-foam Agents

# PERFORMANCE CHARACTERISTICS:

Armor Plate with Moly-D XHP 512M is a thermally stable, extra high performance automotive gear oil. Below are the superior features of the XHP additive system:

- Superior Thermal Stability
- Corrosion Protection
- Complete Shear Stability
- Excellent Water Resistance
- Extended Oil Seal Life

- Exceptional Component Cleanliness
- Reduces Operating Temperature
- Reduced Wear
- GL-5+/MT-1
- Extreme Pressure Rating

**USES:** 

Armor Plate with Moly-D XHP 512M is recommended for heavy-duty hypoid and spiral bevel axles, manual transmissions, transfer cases or power dividers, limited slip differentials, automotive and industrial worm gears, and for axles using phosphate treated gears where MIL-L-2105D products are specified.



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### **APPLICATIONS:**

512M is designed for use where most any SAE 80W, 90, or 80W-90 weight gear lubricant is recommended. The SAE weight recommended for any particular piece of equipment is found in the owners manual or Check Chart.

This product will blend readily with most any approved petroleum base gear lubricant of the same SAE weight; however, it delivers optimum performance when used exclusively in any gear box or application to which it is introduced.

# TYPICAL SPECIFICATIONS:

SAE Viscosity	80W-90
Viscosity Index	100
Flash Point, °F	475
Pour Point, °F	-15
Gravity, API	27.4
Foam, Passed all sequence tests	20/0
Corrosion, 3 hrs @ 212°F	Pass
Precipitation Number	None
Timken Load Test, lbs	55
High Temp/High Shear @ 150°C	5.02
L38 After Shear @ 100°C	14.1
INJ After Shear @ 100°C	14.0

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