

# 514M | Armor Plate with Moly-D

## Industrial XHP Gear Lubricant

### DESCRIPTION:

Armor Plate with Moly-D Industrial XHP 514M is an industrial gear oil developed specifically for the significantly higher temperatures and pressures typical of modern industrial applications. Transmissions systems are designed to convey greater energy through the gear train at increased speeds without a corresponding increase in oil pump size or cooling capacity.

### COMPOSITION:

Armor Plate with Moly-D Industrial XHP is compounded using naturally high VI solvent refined and hydrocracked base stocks. It contains no heavy metals. It has much greater thermal and oxidation stability and this lubricant may be used at much higher temperatures, while providing a higher load-carrying capacity. Armor Plate 514M is compounded with Moly-D, our special molybdenum compound for superior extreme-pressure protection, anti-friction and anti-wear qualities, as well as Primrose's unique adhesive/cohesive additive and a seal swellant to condition seals and help prevent leakage. In addition, it prevents rust and corrosion, has excellent demulsibility, and will not foam.

### PERFORMANCE CHARACTERISTICS:

- Excellent Thermal Stability
- High Load Carrying Capacity
- Superb Oxidation Stability
- High VI Solvent/Hydrocracked Base Stocks
- Extreme Pressure Properties for Extreme Conditions
- Excellent Anti-Wear and Anti-Friction Properties
- Prevents Rust & Corrosion of Metals

The following are performance requirements met and exceeded by this superior lubricant (suitable for use):

MIL-L-2105D	Wheeling Steel Demulsibility Test (ASTM D-221)
DIN 51517 Part 3	AGMA EP Lubricants 2EP thru 8AEP
AIST 224	David Brown S1 53.101 (E)
Falex Rust Test	Turbine Steel Demulsibility Test (ASTM D-1401)
API GL-4 Plus	Turbine Oil Rust Test (ASTM D-665A)

### USES:

514M is formulated for industrial gears subjected to high temperatures and extreme pressures requiring oxidation stability and a high degree of protection in a lubricant. These industrial gears referred to are usually found in-plant, stationary, and in off-road applications.

### APPLICATIONS:

514M is unique in that it meets and exceeds the highest and most universally accepted performance criteria at typical viscosities, yet can be blended to the customer's desired viscosity to meet any manufacturers requirements. AGMA grades 2EP through 8AEP are available.

Armor Plate with Moly-D Industrial XHP 514M can also be ordered by the part number 714M and will bear the label Armor Plate with Moly-D Gear & Mud Pump Oil.

### TYPICAL SPECIFICATIONS:

The following are typical specifications on an AGMA 7EP viscosity:



# PRIMROSE PLUS

## 514M Armor Plate with Moly-D Industrial XHP Gear Lubricant

SO Grade	460
Viscosity Index	100
API Gravity	26
Flash Point, °F	560
Fire Point, °F	600
Timken OK Load, lbs	65
4-Ball Wear Scar Dia., mm	0.35
4-Ball EP, Weld Load, kg.	315
S-200 Oxidation	
% Viscosity Increase	3.0
Copper Corrosion	1A
ASTM Rust Test	Pass
FZG Gear Test, Load Stages	12
Wheeling Demulsibility	
% Water in Oil	0.6
ASTM Foam Test	No Foam

### Viscosity Specifications For Agma Grades:

AGMA No.	ISO Viscosity Grade
2EP	68
3EP	100
4EP	150
5EP	220
6EP	320
7EP	460
8EP	680
8AEP	1000