

714M | **Armor Plate with Moly-D** Gear & Mud Pump Oil

DESCRIPTION:

Armor Plate with Moly-D Gear & Mud Pump Oil 714M is an industrial gear oil developed specifically for the significantly higher temperatures and pressures typical of modern industrial applications. Transmission 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. 714M is engineered to meet the demanding requirements of large, high pressure reciprocating mud pumps utilized in drilling operations.

COMPOSITION:

Armor Plate with Moly-D Gear & Mud Pump Oil is compounded using naturally high VI solvent refined base stocks and a new type additive chemistry specifically designed for industrial gears. This additive overcomes the toxicological and ecological problems associated with lead. 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. The problems of oil jet blockage in large industrial gear boxes due to the presence of sludge settling out are avoided with this oil.

Armor Plate 714M 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:

Industrial gear oils are not usually formulated to meet a government performance or the requirements of other formal qualifying agencies. However, some large industrial corporations have written specifications for their own use which have received wide commercial acceptance. Probably, the most universally accepted industrial oil requirements were developed by the former US Steel, now called USX Corp.

The following are performance requirements met and exceeded by this superior lubricant:

US Steel Requirement 220	Wheeling Steel Demulsibility Test (ASTM D-221)
US Steel Requirement 222	AGMA EP Lubricants 2EP thru 8AEP
US Steel Requirement 224	Cincinnati Milacron P-59 and P-63
Falex Rust Test	Turbine Steel Demulsibility Test (ASTM D-1401)
API GL-4 Plus	Turbine Oil Rust Test (ASTM D-665A)

USES:

714M is formulated for industrial gears subjected to high temperatures and extreme pressures requiring oxidation stability and a high degree of protection in a lubricant which does not contain lead. These industrial gears referred to are usually found in-plant, stationary, and in off-road applications.

APPLICATIONS:

714M 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.



PRIMROSE PLUS

714M Armor Plate with Moly-D Gear & Mud Pump Oil

TYPICAL SPECIFICATIONS:

ISO Grade	460
Viscosity @ 100° F, SUS	2131
Viscosity Index	105
API Gravity	26.0
Flash Point, °F	560
Fire Point, °F	600
Timken OK Load, lbs	80
4-Ball Wear Scar Dia., mm	0.29
4-Ball EP, Weld Load, kg.	400
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 Other Agma Grades

AGMA No.	ISO Viscosity Grade	SUS @ 100°F Viscosity Range
2EP	68	284-347
3EP	100	417-510
4EP	150	626-765
5EP	220	918-1122
6EP	320	1335-1632
7EP	460	1919-2346
8EP	680	2837-3467
8AEP	1000	4172-5099