



TECHNICAL DATA

Al Malik Petroleum Products Trading Co. , *Tel: 04-2667117 *Fax: 04-2626487

Delta Moly Synth EP

Description:

Delta Moly Synth EP is a semi synthetic Blend Heavy duty, Extreme pressure multi purpose grease with Extra protection against wear for all types of lubrication in hot & wet applications.

High Oxidation Resistance – Extended Service Life

Delta Moly Synth EP is blended only from the finest severely hydro-finished 100% pure paraffin base oils which undergo extra solvent refining processes and semi-synthetic polyalphaolefin (PAO) Base oil. plus 80/20 base oil to ensure achieving optimum quality and highest oxidation resistance. The natural high viscosity index of the paraffin base oils allow excellent performance in a wide temperature ranges. The aluminum complex base thickener and selected additives blended into **Delta Moly Synth EP** allows optimum performance and extended service life even under adverse conditions of excessive pressure, high shock loading, high speed, extreme hot and cold temperatures.

Excellent Anti-Wear And Extreme Pressure Additives

Further blended to the 100% pure is extra paraffin base oils, plus 80/20 base oil, and semi- synthetic polyalphaolefin (PAO) Base oil aluminum complex thickener and selected additives is Molybdenum disulfide (Moly). Due to the natural affinity of the Molybdenum Disulfide for metal surfaces, a protective thin layer is plated to the metal surfaces to form a long lasting solid lubricating film which withstands pressures up to 500,000 PSI, thus protecting bearing surfaces during periods of high speed, high shock loads, extreme pressure or startups where usually the (conventional greases) fluid film of lubrication is wiped away and destroyed allowing metal to metal contact which is the main cause of wear.

Friction Reduction And Power Saving

The solid lubricant film formed by the Moly ensures achieving a smooth slippery surface which reduces friction. This reduction in friction results in less wear, lower contact area temperature, therefore you can achieve an increase in equipment operation life, less downtime and reduction of power consumption.



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Excellent Adhesive And Cohesive Properties

Delta Moly Synth EP has superior adhesive and cohesive properties which allow it to remain inside the bearings and resist squeezing out ensuring optimum lubrication and protection to the bearings and reducing dramatically the downtime resulting from stopping the equipment to re-lubricate. Also the high adhesion and cohesion properties of **Delta Moly Synth EP** allows it to resist water wash-out or being squeezed out due to high speed applications or wiped off under shock-loading or vibration applications. Due to the exceptional ability of **Delta Moly Synth** to stay in place, it actually forms its own seal against outside contaminants – be it water, humidity or abrasive or corrosive foreign materials which make **Delta Moly Synth** ideal for operation in wet, dusty or highly contaminated environment.

High Dropping Point and Excellent Pump ability Properties

Due to the high dropping point of Aluminum Complex thickener and natural high viscosity index of the 100% pure paraffin base oils plus .80/20 base oil **Delta Moly Synth EP** is ideal for operating in High temperature environment, yet still pump able at low temperatures.

Excellent Shear and Mechanical Stability

Delta Moly Synth EP is quality engineered to withstand shear stresses, high shock and severe mechanical action, giving it an exceptional 100% reversibility. This capability allows **Delta Moly Synth EP** to retain its grease – like consistency by recapturing its oil and remain in the bearings under adverse conditions.

Cost Effective and Saves Downtime And Money

The Exceptional high quality of **Delta Moly Synth EP** is engineered primarily to help maintenance engineers or equipment operators reduce wear resulting in the need to replace worn-out expensive spare parts, exorbitant downtime, man-hours and production loss. The challenge is to build these expensive friction modifiers and selected additives in a long lasting, stable lubricant; thereby also saving money on your bottom line annual lubrication cost.

Delta Moly Synth EP costs more than conventional greases, however due to the escalating power cost in the new millennium – power savings from the use of **Delta Moly Synth EP** will cover several times the added cost.

.Warning: Do not use in automotive wheel bearings



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Delta Moly Synth EP can be applied either manually or by a heavy duty automatic lube system **Delta Moly Synth EP 1** has an operating temperature of -23°C to 177°C. **Delta Moly Synth EP 2** has an operating temperature of -18°C to 177°C. **Delta Moly Synth EP 3** has an operating temperature of -1°C to 177°C.

TYPICAL PROPERTIES			
NLGI Grade	#1	#2	#3
Type Thickener	Aluminum Complex	Aluminum Complex	Aluminum Complex
Worked Penetration 77°F/25°C (ASTM D-217)	310-340	280-295	220-250
Timken EP Test (ASTM D-2509)	65 lb	65 lb	65 lb
Four Ball EP Test (ASTM D-2596):			
Load Wear Index (kg)	47.82	48.94	51.34
Weld Point (kg)	400	400	400
Four Ball EP Test (ASTM D-2266)			
Scar Diameter, mm	0.63	0.63	0.63
Falex Continuous Load (ASTM D-3233)			
Failure lbs.	3500	3500	3500
Roll Stability Test (ASTM D-1831)			
% Loss Consistency	7	10.2	9.19
Oxidation Stability (ASTM D-942):			
psi loss at 100 hrs.	1	1	1
Water Washout Test (ASTM D-1264)			
% Loss 175°F/79°C	6%	5.50%	5.50%
Lincoln Ventmeter			
Psi @ 100°F	175	550	550
Psi @ 30°F	275	1200	1200
Psi @ 0°F	1200	1200	1300
Psi @ -10°F	1800	----	----
Rust Inhibition Test (ASTM D-1743)			
Rating	1,1,1	1,1,1	1,1,1
Evaporation Loss (ASTM D-2595)			
% Loss 22 hrs. @ 250°F	0.4	0.3	0.25
Oil Separation (ASTM D-1742)			
% Wt. of Oil Separation Loss	1	1	1
Dropping Point °F/°C (ASTM D-2265)	500°/260°	500°/260°	500°/260°
Base Oil Properties			
Viscosity SUS 100°F (ASTM D-445)	1198.2	1198.2	1800
Viscosity Cst 40°C (ASTM D-445)	226.17	226.17	337.94
Viscosity Cst 100°C (ASTM D-445)	18.89	18.89	25.25
Viscosity Index (ASTM D-2270)	95	95	105
Flash Point°F/°C (ASTM D-92)	446/230	446/230	467/242
Fire Point °F/°C (ASTM D-92)	476/247	476/247	487/253