



TECHNICAL DATA

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

Delta Supreme 670

Description:

Delta Supreme 670 is a synthetic blend heavy duty open Gear Lubricant in a wide variety of industrial and Marine applications.

High Oxidation Resistance – Extended Service Life

Delta Supreme 670 is blended only from the finest severely hydro-finished 100% pure paraffin base oils which undergo extra refining processes and polyalphaolefin (PAO) synthetic base oils to ensure achieving optimum quality and highest oxidation resistance. The natural high viscosity index of the paraffin these oils allow excellent performance in a wide temperature range, and lubricate efficiently for much longer intervals.

Extra Adhesive & Cohesive Enhancing Additives.

Delta Supreme 670 base oils are further compounded with a special additive pack which further increases the natural high adhesive & cohesive characteristics of these base oils. This indestructible adhesive film forming capability allows **Delta supreme 670** to resist squeeze out even under heavy, slow speed loads or even high speed & vibration applications. The need to replace gear lubricant that has been thrown off due to the centrifugal forces will be greatly reduced.

Excellent Anti-Wear And Extreme Pressure Additives

Further blended to the 100% pure paraffin base oils and 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.

Excellent Water Washout & Dust Resistance.

Delta supreme 670 indestructible adhesive film will resist water wash-out, especially in out door situations or during washing the equipment. The non-tacky adhesive film texture will also resist adhering of dirt and dust.

Cost Effective - Saves Downtime & Money

The exceptional high quality of **Delta Supreme 670** and the unprecedented pliability and spread-ability will allow you to use much less lubricant quantity which will last for much longer intervals. You will save on the annual cost of lubricant used valuable downtime and man hours to stop machinery for lubrication and / or time consuming and tiring cleaning.

Typical Properties

	300	200	100
	Heavy	Medium	Arctic
Specific Gravity 60°F/15.5°C	1.06	1.05	1.03
Worked Penetration @ 77°F/25°C (ASTM D-217)	350-405	350-400	-----*
Flash Point °F/°C (ASTM D-92)	554°/290°	510°/265.56°	500°/260°
Four Ball EP (ASTM D-2596)			
Weld Point, kgs.	800	800	620
Load Wear Index, kg.	166.1	120	85
Falex Continuous Load (ASTM D-3233)			
Failure Load, lbs/kg.	4500/2045	4500/2045	4500/2045
Four Ball Wear (ASTM D-2266)			
Scar Diameter, mm	0.68	0.6	0.57
Flash Point °F/°C of product, C.O.C (ASTM D-92)	485°/251.67°	445°/229.44°	400°/204.44°
FZG DIN 51-354	+13th Stage	+13th Stage	13th Stage
Base Oil Properties			
Viscosity, SUS @ 40°C (ASTM D-445)	527,754.20	104,577.20	16,819.60
Viscosity, Cst @ 40°C (ASTM D-445)	113,899.40	22,569.75	3,630
Viscosity, SUS @ 100°C (ASTM D-445)	4,086.10	1,632.30	570.2
Viscosity, Cst @ 100°C (ASTM D-445)	876.18	350	123.02
Viscosity Index (ASTM D-2270)	110	105	105
Lincoln Vent Meters			
PSI @ 75°F/23.89°C	0	0	0
PSI @ 30°F/-1.11°C	258	0	0
PSI @ 0°F/-17.78°C	1750	700	116
PSI @ -10°F/-12.22°C	-----	1150	370
Rust Inhibition Test (ASTM D-1743)	1,1,1	1,1,1	1,1,1
Copper Strip Corrosion Test (ASTM D-4048)	1b	1b	1b
Deleterious Particles (ASTM D-1404)			
# of Scratches	14	15	15
Rating	2	2	2