

# Delta Ultra Synth EP

#### **Description:**

**Delta Ultra Synth EP** is truly versatile multipurpose extreme pressure grease with extra tacky fire for hot & wet applications.

### **High Oxidation Resistance – Extended Service Life**

**Delta Ultra Synth EP** is blended only from the finest severely hydro-finished 100% pure paraffin base oils, plus 80/20 base oil. Semi- synthetic polyalphaolefin(PAO). which undergo extra solvent refining processes 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 range. The aluminum complex base thickener and selected additives blended into **Delta Ultra Synth EP** allows optimum performance and extended service life even under adverse conditions of excessive pressure, high shock loading, extreme hot and cold temperatures.

### **Unique Colour Coded Grease**

**Delta Ultra Synth EP** is a red colour coded unique grease that helps maintenance people to check if the right grease is placed at the right place and also determine the condition of the grease by sight.

### **Excellent Anti-Wear And Extreme – Pressure Additives**

Further blended to the 100% pure paraffin base oils, plus 80/20 base oil, Semisynthetic polyalphaolefin(PAO).aluminum complex thickener and selected additives is synthesized moly and a proprietary solid lubricant. Due to the natural affinity of the (synthesized moly and a proprietary solid lubricant) 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 (synthesized moly and a proprietary solid lubricant( 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 Adhesive And Cohesive Properties**

**Delta Ultra Synth EP** has extra tackifier which provide superior adhesive and cohesive properties which allows 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 Ultra 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 Ultra Synth EP** to stay in place, it actually forms its own seal against outside contaminants – be it water, humidity or abrasive or corrosive foreign materials which makes **Delta Ultra Synth EP** 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, Semi- synthetic polyalphaolefin(PAO). **Delta Ultra Synth EP** is ideal for operating in High temperature environment, yet still pump able at low temperatures.

### **Excellent Shear and Mechanical Stability**

**Delta Ultra 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 Ultra 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 Ultra 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 modifies and selected



additives in a long lasting, stable lubricant; thereby also saving money on your bottom line annual lubrication cost

**Delta Ultra 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 Ultra Synth EP** will cover several times the added cost.

**Delta Ultra Synth EP** can be applied either manually or by a heavy duty automatic lube system

**Delta Ultra Synth EP1** has an operating temperature of -23°C to 177°C. **Delta Ultra Synth EP2** has an operating temperature of -18°C to 177°C.

TYPICAL PROPERTIES		
NLGI GRADE	#1	#2
	Aluminum	Aluminum
Type Thickener	Complex	Complex
Worked Penetration 77°F/25°C,		
60 Strokes, (ASTM D-217)	310-340	285-29
Timken EP (ASTM D-2059)		
Fail Load, lbs.	65	65
Four Ball EP (ASTM D-2596)		
Load Wear Index (kg)	54.91	55.08
Weld Point (kg)	400	400
Four Ball Wear Test (ASTM D-2266)		
Scar Diameter	.6mm	.6mm
Falex EP Continuous Load (ASTM		
D-3233)		
Failure Load, Ibs.	3800	4325
Roll Stability Test (ASTM D-1831)		
% Consistency Change	14.52	12.36
Oxidation Stability (ASTM D-942)		
PSI Loss @ 100 hrs.	2	1.5
Water Washout Test (ASTM D-1264)		
% Loss 175°F/79°C	6.10%	5.78%
Water Spray Off Test (ASTM D-4049)	17%	15%
Rust Inhibition Test (ASTM D-1743)		
Rating	1,1,1	1,1,1
Pressure Oil Separation, US Steel Method		
Grams of Oil separation	0.8	0.7
Wheel Bearing Leakage Tendency		
(ASTM D-1263)		
Leakage, grams	0.8	0.8
Deposits	No Deposits	No Deposits
Evaporation Loss (ASTM D-2595)		

% Loss 22 hrs. @ 250°F	0.4	0.4
Oil Separation (ASTM D-1742)		
% Wt. of Oil Separated	1	1
Dropping Point °F/°C (ASTM D-2265)	500°/260°	500°/260°
(Viscosity SUS @100 °F (ASTM D-445	1300	1198.2
(Viscosity Cst @ 40 °C (ASTM D-455	244.96	266.17
(Viscosity Cst @ 100 °C (ASTM D-455	19.71	18.89
(Viscosity Index (ASTM D-2270	105	95
(Flash Point °F/°C (ASTM D-92	458/236	446/230