

## TECHNICAL DATA

102 Barton Street, St. Louis MO 63104 Ph: 800-325-9962 / Fax: 314-865-4107 www.schaefferoil.com

## ISO 9001

## 248 MOLY SYNGARD 2000 EP

Moly Syngard 2000 EP is a multipurpose, extreme pressure, anti-wear grease that is specially formulated for use in all types of heavy duty construction, mining, farming and industrial equipment that are being used in hot, wet or heavily loaded applications especially where operating temperatures are above 350°F.

Moly Syngard 2000 EP is compounded from the finest high viscosity index solvent refined severely hydrofinished 100% pure paraffin base stocks available. Blended into these 100% pure paraffin base stocks is an inorganic thickener. This inorganic thickener allows Moly Syngard 2000 EP the ability to lubricate the bearings effectively in temperatures up to 600°F.

Moly Syngard 2000 EP uses an organic, Synthesized Moly which plates itself to metal surfaces of the bearings like molybdenum disulfide ( $MoS_2$ ). Once plated, Synthesized Moly forms a long lasting lubricant film that further reduces friction and wear, especially during periods of high shock loads, vibration and extreme pressure. This lubricant film will withstand pressures up to 500,000 pounds per square inch, giving the metal surfaces of the bearings the protection they need during these extreme conditions.

Synthesized Moly also helps to reduce friction which results in reduced wear, reduced contact area temperatures, increased equipment life, less downtime and extended lubrication cycles.

The use of Synthesized Moly enables Moly Syngard 2000 EP to be suitable for use in the lubrication of rolling element bearings and can be used in those rolling element bearing applications that have restrictions on the use of greases that contain molybdenum disulfide (MoS<sub>2</sub>).

Moly Syngard 2000 EP has excellent rust and oxidation inhibiting characteristics, excellent water resistance, shear and thermal stability, and good mechanical and pumpability properties. Moly Syngard 2000 EP also has excellent cohesive and adhesive properties. Because of these cohesive and adhesive properties, Moly Syngard 2000 EP will not wash out, pound out, splatter or squeeze out even under the heaviest loads or vibrations.

Moly Syngard 2000 EP can be applied either manually or by a heavy duty automatic lube system. Moly Syngard 2000 EP #1 has an operating temperature of -5°F to 600°F. Moly Syngard 2000 EP #2 has an operating temperature of 0°F to 600°F. Moly Syngard 2000 EP #3 has an operating temperature of 30°F to 600°F.

## **TYPICAL PROPERTIES**

NLGI	1	2	3
Type Thickener	Bentone	Bentone	Bentone
Dropping Point (ASTM D2265)	None	None	None
Worked Penetration 77°F/25°C (ASTM D217)	310-340	285-295	220-250
Roll Stability (ASTM D1831)			
% Change in Consistency	20	19.3	19.2
Rust Inhibition Test (ASTM D1743)			
Rating	1,1,1	1,1,1	1,1,1
Oxidation Stability (ASTM D942):			
psi Loss @ 100 hrs.	4	4	4
Timken EP Test (ASTM D2509)	60 lbs.	60 lbs.	60 lbs.
Four Ball EP Test (ASTM D2596):			
Load Wear Index, kg	40	45	45
Weld Point, kg	315	315	315
Four Ball Wear Test (ASTM D2266)			
Scar Diameter	.68mm	.68mm	.7 mm
Falex Continuous Load (ASTM D3233)			
Failure, lbs	1950	2000	2100
Wheel Bearing Leakage Tendency Test			
(ASTM D1263)			
Leakage, grams*	1	1	1
Deposits	No Deposits	No Deposits	No Deposits
Water Washout (ASTM D1264)			
% Loss @ 175°F	7.5	7	7
Water Spray-off Test (ASTM D4049)			
% Loss	30	30	25
Oil Separation (ASTM D1742)			
% Wt. of Oil Separation	2	2	2
Evaporation Loss (ASTM D2595)			
22 hrs. @ 250°F	0.9	0.9	0.9
Base Oil Properties			
Viscosity SUS 100°F (ASTM D445)	1200	1500	1900
Viscosity cSt 40°C (ASTM D445)	226.18	282.04	413.11
Viscosity cSt 100°C (ASTM D445)	18.5	21.95	30.18
Viscosity Index (ASTM D2270)	105	105	105
Flash Point °F/°C (ASTM D92)	530°/277°	520°/271°	510°/265°
Fire Point °F/°C (ASTM D92)	560/293°	590°/310°	540°/282°