



# TECHNICAL DATA

102 Barton Street, St. Louis, Missouri 63104

In-State (314) 865-4100/Out of State 800-325-9962/Fax (314) 865-4107 <http://www.schaefferoil.com>

## #248 MOLY SYNGARD 2000 EP

Moly Syngard 2000 EP is a multipurpose, extreme pressure antiwear 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.

Further blended into these 100% paraffin base stocks is synthesized moly. Synthesized moly is an organic type of moly which, like molybdenum disulfide (MoS<sub>2</sub>), plates itself to metal surfaces of the bearings. Once plated to the metal surfaces of the bearings, moly forms a long lasting solid lubricant film. This solid 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 periods of high speeds, high shock loads and extreme pressures.

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 -15°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 D-2265)	None	None	None
Worked Penetration 77°F/25°C (ASTM D-217)	310-340	285-295	220-250
Roll Stability (ASTM D-1831) % Change in Consistency	20	19.3	19.2
Rust Inhibition Test (ASTM D-1743) Rating	1,1,1	1,1,1	1,1,1
Oxidation Stability (ASTM D-942): Psi Loss @ 100 hrs.	4	4	4
Timken EP Test (ASTM D-2509)	60 lbs.	60 lbs.	60 lbs.
Four Ball EP Test (ASTM D-2596): Load Wear Index, kg	40	45	45
Weld Point, kg	315	315	315
Four Ball Wear Test (ASTM D-2266) Scar Diameter	.68mm	.68mm	.7 mm
Falex Continuous Load (ASTM D-3233) Failure, lbs	1950	2000	2100

TYPICAL PROPERTIES CONTINUED

<b>Wheel Bearing Leakage Tendency Test (ASTM D-1263)</b>			
Leakage, grams*	1	1	1
Deposits	No Deposits	No Deposits	No Deposits
<b>Water Washout (ASTM D-1264)</b>			
% Loss @ 175°F	7.5	7	7
<b>Water Spray-off Test (ASTM D-4049)</b>			
% Loss	30	30	25
<b>Oil Separation (ASTM D-1742)</b>			
% Wt. of Oil Separation	2	2	2
<b>Evaporation Loss (ASTM D-2595)</b>			
22 hrs. @ 250°F	0.9	0.9	0.9
<b>Lincoln Ventmeters</b>			
Psi @ 100°F	350	300	300
Psi @ 30°F	450	500	500
Psi @ 30°F	900	1250	1250
Psi @ -10°F	1100	1100	1100
<b>Base Oil Properties</b>			
Viscosity SUS 100°F (ASTM D-445)	1200	1500	1900
Viscosity Cst 40°C (ASTM D-445)	226.18	282.04	413.11
Viscosity Cst 100°C (ASTM D-445)	18.5	21.95	30.18
Viscosity Index (ASTM D-2270)	105	105	105
Flash Point °F/°C (ASTM D-92)	530°/276.7°	520°/271.1°	510°/265.5°
Fire Point °F/°C (ASTM D-92)	560°/293.3°	590°/310°	540°/282.2°

Packaging: #248 Moly Syngard 2000 EP is available in (net weights) 420 lb. drums, 120 lb. drums, 120 lb. drums, 40 lb. pails and cartridges (30 per case).