



## Pro-One EP2 Industrial Grease Description

ProOne's EP-2 Industrial Grease is truly heavy duty High Extreme Pressure Multi-purpose grease. ProOne's EP-2 is designed for low or high speed plain and rolling element bearings, and sliding mechanisms operating under generally difficult conditions such as high temperatures, water, heavy load and impact conditions for heavy duty equipment, drilling equipment, steel mills and paper corrugating plants.

Proprietary XPL+ additive technology (+ Ionic charged molecule structure) and highly refined oils gives high film strength under EP (extreme pressure) conditions with good oxidative and thermal stability. Specially designed mixed base calcium sulfonate complex soap structure provides high dropping point, mechanical and thermal stability with heavy water and corrosion resistance.

ProOne's EP-2 Industrial grease has excellent shear stability coupled with low oil bleed characteristics under high temperature operation, severe water contamination, and high radial forces.

## Pro-One EP 2 Industrial Grease Typical Properties vs. Competitor EP2 Multipurpose grease

	Pro-One EP2 Industrial Grease	vs.	Competitor EP2 Grease
NLGI Grade	2		2
Color	Blue		Amber, Brown or Dark grey/black
Thickener	Calcium Complex		Calcium Complex
Kinematic viscosity of base oils @40°C (ASTM 445)	216 cSt (1000 SUS)		170 - 195 cSt
Penetration @ 25°C (77°F) (ASTM D-217), mm/10			
Worked 60 strokes	270-295		140-220
Mechanical Stability (ASTM D-217) % change from P60			
P100,000 strokes <b>Unworked</b>	2.5%		Not Available
P10,000 strokes with 50% H2O <b>Worked</b>	<6.0%		Not Available
Dropping Point (ASTM D-2265) °C	+300°C		120 - 250°C
Oil Separation (ASTM D-1742) –24 hours @ 25°C (77°F)	0.17		2.3
Shell Roll Stability (ASTM D-1831)	<4.0%		Not Available
Oxidation Stability (ASTM D-942) psi drop/500 hours	6.0 lbs		Not Available
Oxidation Bearing Life (ASTM D-3527)	200 hours		130 hours
4-Ball Wear Test (ASTM D-2266)			
mm scar, 40kg, 1200 RPM, 75°F, 1H	0.42mm		0.95mm to 1.67mm
4-Ball EP test (ASTM D-2596)			
LWI, kg	>75		<55
Weld Load, kg	600		315
Timken OK Load (ASTM D-2509) lbs/kg	60/27		40/18
Rust test (ASTM D 1743)	Pass		Pass
Copper Corrosion test (ASTM D-130)	Pass/1b		Not Available
Salt Fog Spray (ASTM B-117) hours to failure	>1000 hours		Not Available
Water Washout (ASTM D-1264) @ 80°C, % loss (Less < % value is better than higher > % value)	<2.5%		>3 - 4.8%
Wheel bearing leakage grams (ASTM D-1263)			
Modified @ 163°C (325°F)	0.4		Not Available
Base Oil Characteristics			
Viscosity SUS @ 100°F	1100		580 - 930
Viscosity SUS @ 210°F	85		69 – 78
Pour Point, °F	+5		Not Available

## ***Pro-One's EP2 Industrial Grease Features vs. Competitor EP2 Multipurpose Grease Products***

ProOne's EP-2 Industrial greases are ideal where hot and cold, low and high-speed bearings must share the same lubricant. EP-2 Industrial greases having been designed for wet and hot end use for roll neck journal bearings found in Mining, Marine, Agricultural, Drilling equipment, Heavy duty equipment, Paper & Steel Mill operations. Excellent for heavily loaded hinge pins, splines, couplings, drill chucks, CV and universal joints. For use on rolling mills, slabbing mills, truck chassis, wheel bearings; also general lube points on track rolls of heavy duty construction and earth moving equipment

## ***Visible Industry Grease related failures using competitor EP2 Multipurpose grease products vs Pro-One XPL+ EP2 Industrial Grease (see below)***

- Grease melting, leakage or bleeding while operating in ambient and high temperatures resulting in premature failure
- Water wash out on bearings, hinged pins and bussing, operating machinery and pumps in muds, slurry, moisture and water conditions
- Grease hardening caused by Industry "dusts" contamination (Chrome, coal, asphalt, sand etc.)
- Premature failure on bearing, hinge pins and bussing failures and wear operating under heavy loads and high pressure conditions
- Rusty corroded and stick metal parts caused while operating equipment in chemicals, acids, slurry or water

## ***Pro-One XPL+ EP2 Industrial Grease (Extreme Pressure)***

### ***Visible Features and Benefits solving industry related grease failures***

- **620 Kg Weld Load Minimum** Treated with Pro-One's Proprietary XPL+EP/AW Technology
- **Excellent Resistance to water wash off** - Pro-One's greases are insoluble in water
- **Excellent Shear Stability** - Will not thin down due to heat or shear, even with heavy water wash
- **Extreme pressure** - protection, shear stability, oxidation & corrosion resistance and seal metals
- **Excellent Thermal and Mechanical Stability** - May be used to **+300°C** with proper lubrication cycles
- **Increased Production** - Reduce downtime, consumption and lower operating costs, increased parts life, reduces downtime for repairs on parts replacement coupled with decreased labour to repair those parts replacement coupled with maintenance
- **Increased & Extend** re-greasing intervals due to cling capability and adhesive properties
- **Unsurpassed** rust and corrosion protection
- **Excellent** pump ability
- **Environmental Friendly** - Does not contain any solids, harmful solvents or chlorine

## ***Pro-One XPL+ EP2 Industrial Grease Tested and Exceed performance vs. competitors EP2 Multipurpose greases to following application***

- Heavy duty Equipment, Drilling equipment, Forklifts, Crushers and Screener (underground and surface mining)
- Hinged pin and bushings
- Drill chucks and drill rods
- Wheel bearings
- Open gears
- Wire rope Conveyor Systems
- Slurry & Water Pumps
- Plummer block and centre bearings
- Chains & Cables