



## Petrotac EP Premium

Phillips 66® Petrotac EP Premium represents the latest technology in open gear lubrication designed to meet the requirements of leading original equipment manufacturers (OEM). Petrotac EP Premium is an adhesive, semi-synthetic, extreme pressure (EP) gear lubricant used primarily for the lubrication and cushioning of open gears on shovels, draglines and associated mining equipment. It is designed to be applied through all automatic lubrication equipment including drip, spray or brush applicators.

Petrotac EP Premium is specially formulated with high viscosity base oils and polyalphaolefin (PAO) synthetic base stocks to provide an exceptional adhesive film on wear surfaces while solid EP additives provide superior protection in the highest load zones on the gear tooth. The tenacious film allows Petrotac EP Premium to resist “squeeze out” and cling to vertical gearing and sliding surfaces that are common in mobile mining equipment. Petrotac EP Premium can also be applied to sleeve type bushings and bearings as well as anti-friction bearings that are slow speed, high load by definition.

Petrotac EP Premium is available in two grades for use over a wide range of ambient operating temperatures.

### Applications

- Open and semi-enclosed gears found on shovels, draglines and other mobile mining equipment
- Guides and sliding surfaces with large clearances where adhesive lubricants are specified
- Plain bearings and low speed, heavily loaded rolling element bearings

Petrotac EP Premium exceeds OEM base oil viscosity requirements for open gear lubricants on shovels and draglines.

### Features/Benefits

- Excellent adhesion to metal surfaces
- Forms a heavy, tenacious film to lubricate and cushion gear teeth
- Exceptional protection in the most heavily loaded zones of the gear tooth
- 4-ball weld load >800 kgf
- Good resistance to water washout in rain and snow
- Will not flake off at low temperatures
- Environmentally friendly - does not contain any chlorine, lead or solvents
- Suitable for use with automatic lubrication equipment
- Suitable for use at ambient temperatures down to -15°F (Grade 20B)

**Semi-Synthetic  
Open Gear  
Lubricant  
for Shovels,  
Draglines and  
Mobile Mining  
Equipment**





## Petrotac EP Premium

Typical Properties			
Grade		20B	30B
Specific Gravity @ 60°F	ASTM D1298	1.02	1.01
Density, lbs/gal @ 60°F	Calculated	8.51	8.43
Color, Visual	Visual	Black	Black
Appearance	Visual	Viscous	Viscous
Consistency	Visual	Semi-fluid	Semi-fluid
Flash Point, °C (°F)	ASTM D92	140 (284)	148 (300)
Base Oil Viscosity	ASTM D445		
cSt @ 40°C		50,000	50,000
Copper Corrosion	ASTM D4048	1A	1A
Four-Ball EP Weld Load, kgf	ASTM D2596	>800	>800
Rust Test	ASTM D1743	Pass	Pass
Lincoln Ventmeter, 600 psi	Lincoln VE-1	-15°F@<150 sec	20°F@<30 sec
Operating Temperature (ambient)			
°C		-26 to 25	-7 to 49
°F		-15 to 77	20 to 120

## Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/SDS>.