



PENNLITH[®] ULTRA EP GREASES

Heavy Duty, Extreme Pressure, Tacky Lithium Greases

PRODUCT DESCRIPTION

PENNLITH[®] ULTRA EP GREASES were developed to meet the growing need for a truly heavy duty, highly adhesive, water resistant grease having very high load carrying capabilities, for use in the commercial and industrial markets. As evidenced by a Timken EP rating of 70 pounds, PENNLITH[®] ULTRA EP GREASES offer superior protection against wear caused by heavy and shock loads, thereby extending equipment life and reducing downtime. This degree of protection is not typically found with most conventional greases.

PENNLITH[®] ULTRA EP GREASES are formulated from a lithium 12-hydroxy stearate thickener and highly refined, high viscosity base stocks. Their extremely tacky nature is derived through the use of stable polymers that impart excellent water resistance and strong metal adhesion properties. This feature allows PENNLITH[®] ULTRA EP GREASES to resist washout, not only by water, but also by heavy loads and pressure, as well. These greases are dyed red for ready identification and differentiation from other products.

PENNLITH[®] ULTRA EP GREASES offer excellent mechanical stability, both in use and during storage. They further afford outstanding cold temperature pumpability, and are available in two grades, NLGI 2, and NLGI 1 for colder weather.

PENNLITH[®] ULTRA EP GREASES are fortified with oxidation, rust and corrosion inhibitors to extend service life and protect metal surfaces from rust and etching. This is especially important in those applications exposed to constant or intermittent water, mud and other contamination. The combination of effective protection against extreme pressures, water washout, squeeze out under loading, oxidation, rust, corrosion and shear-down make PENNLITH[®] ULTRA EP GREASES extremely versatile, multi-purposes lubricants.

APPLICATION

PENNLITH[®] ULTRA EP GREASES are ideal for use in severe service commercial and industrial applications where high load carrying characteristics, adhesive properties and water resistance are needed. Some of the recommended applications would include those found in mining, construction, agriculture, logging, dredging, truck fleets, materials handling, offshore drilling, pulp and paper machines, rock quarries, concrete mixing equipment, and numerous others. The versatile nature of PENNLITH[®] ULTRA EP GREASES may allow them to replace several different greases at one time, hence reducing inventory of the number of products used.

BENEFITS

- Unexcelled load carrying capabilities
- Outstanding water resistance
- Won't "pound-out"
- Protects against rust and corrosion
- Versatile - can replace several other greases

**TYPICAL PHYSICAL AND CHEMICAL PROPERTIES
PENNLITH® ULTRA EP GREASES**

TEST	METHOD	TYPICAL RESULTS	
NLGI Grade		1	2
Thickener Type		Lithium 12-hydroxy stearate	
Pounds per Gallon		7.622	7.627
Worked Penetration, 60 strokes	ASTM D-217	325	280
Penetration Change, 10,000 strokes	ASTM D-217	-3.0%	-0.1%
Dropping Point, °C(°F)	ASTM D-2265	188(370)	190(374)
Color		Red	Red
Texture		Tacky	Tacky
Water Washout Test, % loss @ 175°F	ASTM D-1264	5.8	5.4
Oxidation Stability @ 210°F, psi loss @ 100 hrs.	ASTM D-942	5	5
Rust Test	ASTM D-1743	1,1,1-pass	1,1,1-pass
Timken EP Test OK Load, lbs.	ASTM D-2509	70	70
Four Ball Wear Test mm scar @ 40 kg, 1 hr., 75°C, 1200 rpm	ASTM D-2266	0.50	0.51
Four Ball EP Test Weld Load, kg	ASTM D-2596	315	315
Load Wear Index	ASTM D-2596	45	52
Base Oil Properties			
Viscosities			
@ 40°C, cSt	ASTM D-445	313	313
@ 100°C, cSt	ASTM D-445	21.6	21.6
@ 100°F, SUS	ASTM D-445, D-2161	1680	1680
@ 210°F, SUS	ASTM D-445, D-2161	109	109
Viscosity Index	ASTM D-2270	83	83
Material Number			
400 Pound Drum		4549	4559
120 Pound Drum		4548	4558
35 Pound Pail		4542	4552
10/14 Ounce Cartridges		4545	4555
Liqua-Bin		--	5035995