

SUPERIOR EXTRA HEAVY TK EP

Heavy Duty Grease Based on Calcium Sulfonate Complex Thickener

Unlike conventional greases, SUPERIOR EXTRA HEAVY TK EP provides outstanding wear protection without the use of extreme pressure (EP) additives. The calcium sulfonate complex thickener alone provides protection under extreme pressure. The absence of sulfur and phosphorus-based EP additives results in longer grease life since these materials are chemically active and shorten grease life by degrading the thickener.

SUPERIOR EXTRA HEAVY TK EP also provides outstanding resistance to water and does it in a unique way. The grease thickens when it comes into contact with water. When water gets past the bearing seal, the grease in immediate proximity to the seal forms a collar of stiffer grease that blocks further entry of water. The effect is verified by the water washout test (ASTM D-1264), a test that uses a greased bearing and a jet of water. The result is frequently 0% grease loss for this grease.

The protection from corrosion due to brine, acids or alkaline materials is unprecedented. The grease itself resists breaking down when attacked by these materials, and it also protects the metal from corrosion. SUPERIOR HEAVY TK EP can be used as a medium-term rust preventive. It passes the ASTM D-2247 rust test, lasting over 500 hours in 100% relative humidity at 100°F (38°C).

SUPERIOR EXTRA HEAVY TK EP can operate at temperatures up to 400°F (200°C) with regular re-greasing. More frequent re-greasing will permit even higher temperatures.

It is suitable for use in slow and medium-speed bearings. Meets DIN 51502 standard KP2R -20.

BENEFITS:

- LONG LIFE – reduced labor and material costs.
- WATER RESISTANCE – blocks entry of water into bearings.
- HEAVY DUTY – recommended for use on slow and medium-speed bearings and bushings whether under light or heavy load.

APPLICATIONS:

WATER / CONTAMINANTS / CHEMICALS – Phosphate processing, the wet end of papermaking machines, lower bearing of Archimedes screws, boat trailer wheel bearings and other wet applications.

HIGHLY LOADED EQUIPMENT – Pellet mills, shaker screens, belt conveyors, centrifuges, hammermills, fan bearings, pin and bushing joints and others.

HIGH TEMPERATURES – Oven conveyor bearings, plastic extruder bearings, lehr bearings, rotary unions.

AUTOMOTIVE AND EARTHMOVING APPLICATIONS – Wheel bearings, slewing bearing, vehicle chassis points and U-joints, as well as pivot points and pins.

ASTM #	CHARACTERISTICS			
Grade	0	1	2	
D-217	Cone Penetration, (Worked)	355-385	310-340	265-295
D-2265	Dropping Point, °F (°C)	600 (320)	600 (320)	600 (320)
D-445	Base Oil Kinematic Viscosity			
	cst @ 40°C	460	460	460
	cst @ 100°C	31	31	31
D-1264	Water Washout, % Loss	--	1	1
D-2596	Four Ball EP Weld Point, kg	800	>800	>800
D-2266	Four Ball Wear Scar Width, mm @ kg	0.39	0.39	0.39
OEM Standard	Low temperature Pumpability			
	Lincoln Ventmeter @ 400 psi, °F (°C)	-20 (-29)	-12 (-11)	33.8 (1)

The above are typical values. Minor variations which do not affect product performance are to be expected in normal manufacturing.