

“PERFORMANCE UNDER PRESSURE”



CV 500 GREASE

**Constant Velocity &
Articulated Joint Lubricant
Anti-seize Lubricating Paste to 1200 °F**

Product Description

NEO CV 500 Grease is a complex blend of mineral oils, synthetic esters and lubricating solids. NEO CV500 should be used when temperature extremes are not a problem. (See special note.) Their designed use is for severe sliding contact such as extremely heavily loaded ways and guides, very slow, large diameter ball and roller bearings, bushings, linear and oscillating mechanisms and open gears. Articulated, CV and Universal Joints subject to the hardest shock loading, angularity and radial forces such as found on ALL-TERRAIN VEHICLES. Can be used on sensitive metallurgy including copper, silver, tin and aluminum and their alloys. Exceptionally resistant to water wash conditions including emulsions. Special compounding and lubricating solids provide superior antiseize characteristics and exceptional acid resistance.

*SPECIAL NOTE: NEO HPCC#1 should be used when extreme high & low temperatures are encountered or sustained. Elevated temperatures indicate extra protection is needed.

Applications;

Vehicular uses of NEO CV 500 Grease are typically constant velocity couplings (CV joints) and industrial applications include linear reciprocating mechanisms, heavily loaded ways & guides, spline couplings subject to linear motion & heavy loads in either direction, press fit & assembly operations, jack screws, mechanical presses, and very slow large diameter ball & roller bearings.

Special Applications: Antiseize to 1200°F. Assembly and spline Lubricant, Racing Cam Lubricant, Press Fitting Stainless Steel, Jack Screws, High Temperature Open Gear Lubricant, Mechanical Presses, Dipper Sticks & Fasteners. Pump and valve lubrication in corrosive environments. MoS2 (Moly) is recommended for all constant velocity joints except for double articulated spider types.

SPECIFICATIONS

VALUE

NLGI Grade	2 ½
Worked Penetration @ 60 Strokes	250
Dropping Point, °C	315
Base Oil, ISO VG Grade	1000
Pour Point, °C, (F)	+5 (+41)
Flash Point, °C, (F)	+270 (518)
Shell 4 Ball EP, weld load Kg >>Does not Weld @ 800Kg<<	
Load Wear Index	200

HP 800 MULTI PURPOSE GREASE

Product Description

NEO HP800 Heavy Duty EP grease for plain and rolling element bearings, and sliding mechanisms operating generally difficult conditions. Exceptionally resistant to water wash out including emulsions, NEO HP800 was designed specifically for precision rolling element bearings in high performance racing cars. This grease is slightly thinner in consistency and has a higher viscosity synthetic fluid incorporated in its design as compared to greases normally used for passenger vehicles and is designed to lubricate to 425 °C (800 °F).

NEO HP800 is designed for the peripheral speeds encountered by wheel bearings in racing which are 3 to 6 times that of passenger cars and prevent “channeling of the grease” under these conditions which requires a lighter consistency product. Due to the excessive heat generated by over-sized disk brakes, the fluid constituent of the grease is synthetic and of a higher viscosity so as to provide the proper oil viscosity at operating temperature, thereby preventing thin film rupture, and excessive wear. Special additive technology & synthetic fluids give high film strength under EP conditions with exceptional oxidative & thermal stability. Can be used on sensitive metallurgy including copper, silver, tin, aluminum, & their alloys. Highly specialized mixed base complex soap structure provides high dropping point, mechanical & thermal stability. Low bleed characteristics insure protection at high temperature & high radial forces.

Applications;

Ideal for use in high temperature lubricated packing boxes, hot & cold rolling mills, slabbing mills, ladle pins, continuous casting wheels, converter bearings, overhead conveyor bearings; also bushings, bearings, & cutter head mechanisms on continuous mining machines. Unexcelled for high speed, highly loaded couplings & splines found in steel mill operations. NLGI grade 1 ½ designed for grease lubricated roll neck bearings & automatic grease dispensing systems.

SPECIFICATIONS Classified as N.L.G.I Grade 1 ½

Penetration	292
Mechanical Stability	
100,000 strokes	308
% Change	4.4%
Dropping Point	>600 °F
(Modified drop test in house)	800 °F
Evaporation Wt. Loss @ 250 °F, 24hr	.045%
Copper Corrosion @ 212 °F 3hrs	1 Lb
4-Ball EP Weld Load	350Kg
Oil Viscosity @ 100 °F	2500 SUS
@ 210 °F	210 SUS
Flash Point	577 °F
Pour Point	-30 °F
Timken Ok Load	60 Lbs

HPCC #1 GREASE
100% SYNTHETIC HIGH PERFORMANCE
CALCIUM COMPLEX

Product Description

NEO HPCC#1 Grease is specialty grease for linear and oscillating mechanisms and couplings, such as constant velocity couplings (CV joints) and sealed bearings. It will take heavy shock loads, frequent axial movements, large speed variations, and frequent reversing. It is made with a higher molecular weight synthetic base stock and will withstand extreme temperatures. It has a very strong resistance to water washout in rain or even salt water.

NEO HPCC#1 Grease is designed for low oil separation under centrifuging. It is classified as an NLGI#1 ½ Grade grease but will react to the amount of shear loading and will stiffen to a hard #2 grade grease. The grease is designed to “skin over” to create a shell that resists dirt & moisture, but this shell does not in any way detract from the lubricating qualities. For this reason, this is an excellent product for “sealed for life” bearings or large open gears. It is equally at home in dusty climates and very wet locations.

Applications:

HPCC#1/s designed use is for severe sliding, skidding and rolling contact such as extremely heavily loaded ways and guides: slow, large diameter ball & roller bearings, journals, linear & oscillating mechanisms; and Constant Velocity, Articulated, Knuckle & Universal Joints subject to the harshest shock loading, angularity, radial forces and high torque transmission to driving components. Selected applications are found on demanding Military Mobile Equipment, All-Terrain Vehicles, Armored Troop Carriers & Commercial Off-Road Construction equipment. HPCC #1 can be used on sensitive metallurgy including copper, silver, tin, aluminum and their alloys. Exceptionally resistant to water wash conditions including emulsions. HPCC #1 is specially formulated to slightly “skin dry” when in contact with air to provide self-sealing protection when seals are deteriorated. Special compounding & lubricating solids provide superior antiseize characteristics & exceptional acid & corrosion resistance.

Special Applications:

Antiseize to 1200° F. Assembly and Spline Lubricant, Cam Lubricant, Jack Screws and Fasteners, Logging Hammers, Knuckle Joints, Outboard Bearings, and Launch Grease; Pump and Valve lubrication in moderately hot, corrosive, wet environments.

Specifications:*

NEO High Performance Calcium Complex (HPCC) #1 Grease is classified as N.L.G.I Grade 1 ½ and will Grade 2. Color is Moly Gray.

*Subject to normal manufacturing tolerances.

<u>SPECIFICATION</u>	<u>VALUE</u>	<u>TEST METHOD</u>
Base Oil	ISO Viscosity 500	
Viscosity Increase	@ 100° F 10.5%	72 hours
	@ 210° F 6.7%	72 hours
Unworked penetration	@ 77° F 330	
Worked Penetration	@ 77° F 300	60 strokes
	260	60,000 strokes
4-Ball EP Weld Load	None	Shell: 800 Kg
Load Wear Index	160	
4-Ball Wear Scar	1.72 mm	800Kg. 10 seconds
Endurance Wear Scar	1.45 mm	Shell; 500 Kg @ 900 rpm, 5 minutes
Evaporation Loss	@ 300° F 1.4%	300 hours
	@ 400° F 2.1%	72 hours
Oil Separation	5.0%	Cone Method; 30 hours @ 350° F FTM Standard 791-6, 321.2
Oxidation Stability	<4.0%	D942 Pressure Drop, 400 hours
Dropping Point	600. °F	
Pour Point	-18. °F	
Flash Point	600. °F	
Fire Point	650. °F	
Density	@ 60° F 9.11 pounds/gallon	