



Chevron

Lubricants

Chevron Black Pearl® Greases EP NLGI 0, 1, 2

Features

Chevron Black Pearl Greases EP are multipurpose, extreme pressure, water-resistant greases manufactured using selected base oils, a polyurea acetate complex thickener, and rust and oxidation inhibitors. They are black in color and smooth and buttery in texture.

Functions

Chevron Black Pearl Greases EP provide outstanding film strength and adhesive properties. As a result, these products are particularly effective in providing superior wear protection in heavily loaded and shock load conditions. Chevron Black Pearl Greases EP comply with Timken recommendations for a grease to lubricate heavily loaded and shock loaded bearings in steel mills. The Timken film test rating of the NLGI 2 is 60 lb at 25,500 psi, indicating high load-carrying capacity and low wear.

Chevron Black Pearl Greases EP stay in place, sticking to bearing surfaces and, thus, provide excellent lubrication under a wide range of operating conditions. They perform very well in roller bearings. They offer excellent water resistance and will not wash off surfaces. The rust inhibitors effectively protect bearing surfaces against corrosion. These greases pass the modified ASTM D 1743 Bearing Rust Test using 20% synthetic sea water. Pumpability is excellent over a wide range of temperatures as indicated by the relatively low pressure drop in piping. Oxidation inhibitors ensure long life in storage and in use.

Chevron Black Pearl Greases EP also perform well at high temperatures. High speed bearing tests show performance superior to that of popular lithium greases. At 149°C (300°F) and 200,000 DN, the NLGI 2 gave bearing lives of 800 hours versus 400 hours for a lithium grease.

Applications



Chevron Black Pearl Greases EP are recommended for general lubrication service in both automotive and industrial applications. Grades NLGI 1 and 2 are approved for the NLGI Certification Mark GC-LB for use as automotive chassis and wheel bearing greases based on ASTM D 4950. They work well in both plain and antifriction-type bearings, particularly those subjected to shock loading.

Chevron Black Pearl Greases EP are authorized by USDA for use in federally inspected meat and poultry plants as H2 lubricants with no food contact.

These multipurpose greases can satisfy grease requirements of most industrial plants and automotive equipment. They will replace most specialized products. Their excellent pumpability and low oil separation make them ideal for use in centralized lubrication systems.

Typical industrial applications are:

- Presses
- Antifriction bearings
- Low and high speed journal bearings
- Roller and needle bearings
- Shaker or classifier screen bearings
- General machinery lubrication
- Conveyors and run out rolls
- Electric motor bearings
- Steel mill roller bearings
- Exhaust fan bearings
- Crusher bearings
- Pump bearings
- Paper machines, wet-end and drier sections

Typical automotive applications are:

- All chassis points including ball joints and universal joints
- Wheel bearings
- Water pumps
- Fifth wheels
- Steering system bearings
- King pins

Other uses include:

- Construction equipment
- Agricultural equipment



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Customer Benefits

EXCELLENT PUMPABILITY. Viscosity measurements at grease pump shear rates show these greases will pump easily.

HIGH LOAD CAPACITY. As a result of high film strength, shock load protection and low wear is ensured.

CORROSION PROTECTION. Pass the modified ASTM D 1743 Bearing Rust Test with 20% synthetic sea water.

WATER RESISTANT. They do not wash off and, thus, provide excellent lubrication in the presence of water.

EXCELLENT ADHESION. These greases stay in place and continue lubricating under most operating conditions.

LONG LUBRICANT LIFE in storage and in use.

MINIMIZE INVENTORIES. One grease satisfies almost 100% of the grease requirements of most industrial plants as well as of automotive equipment.

Typical Test Data

NLGI Grade	0	1	2
CPS No.	254590	254592	254591
Penetration, at 25°C(77°F)			
Unworked	315	295	225
Worked (60 strokes)	365	325	280
Worked (100,000 strokes)	>400	370	350
Dropping Point, °C(°F)	240(464)	245(473)	245(473)
Timken OK Load, lb	55	60	60
Four-Ball			
Weld Point, kg	250	400	400
Wear Scar Diameter, mm	0.42	0.42	0.42
Lincoln Ventmeter, psig at 30 s at			
75°F	185	215	300
30°F	210	235	350
0°F	240	280	800
-22°F	465	625	⊙
Copper Corrosion	1a	1a	1a
Bearing Rust, 20% synthetic sea water	Pass	Pass	Pass
Thickener, %	13.0	15.3	18.2
Type	Polyurea Complex	Polyurea Complex	Polyurea Complex
Viscosity, Kinematic*			
cSt at 40°C	145	145	170
cSt at 100°C	12.3	12.3	15.0
Viscosity, Saybolt*			
SUS at 100°F	770	770	899
SUS at 210°F	69	69	80
Viscosity Index	67	67	87
Flash Point, °C(°F)*	246(475)	246(475)	260(500)
Pour Point, °C(°F)*	-15(+5)	-15(+5)	-15(+5)
Texture	Smooth, Buttery	Smooth, Buttery	Smooth, Buttery
Color	Black	Black	Black

Typical test data are average values only. Minor variations which do not affect product performance are to be expected in normal manufacturing.

*Determined on mineral oil extracted by vacuum filtration.

⊙Too stiff at this temperature to pump through device.

GR-10

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Chevron Products Company