



GEAR SHIELD® NCW Open Gear Lubricant

Product Data Sheet

Product Description

Petron Gear Shield® is the world leader in lubrication for open gear drives on stationary rotating machinery. Petron Gear Shield® is the newest generation in a long proven family of open gear lubricants. Gear Shield® is a high-viscosity fluid that provides superior separation of gear teeth in the heaviest loaded zone of gear tooth mesh. Gear Shield® is a blend of high-viscosity base fluids and highly refined resins combined with E.P. and oxidation-resistant additives further enhancing this protection. Petron Gear Shield® is the open gear lubricant of choice for mills and kilns in mineral processing such as gold, copper, iron, taconite, and phosphate. It is also the product of choice in the power generation and cement industries.

Features & Benefits

- High Viscosity Fluid designed to lubricate heavily loaded open gears.
- Anti-wear and extreme pressure additives provide unparalleled protection in the most heavily loaded zones of gear tooth mesh.
- Industry-leading FZG Specific Mass Loss wear test result (0.0532 mg/kWh).
- No build-up in gear tooth roots.
- Drains freely from gear guards.
- Pumps freely down to 0° F/-18° C.
- Environmentally friendly. Does not contain chlorinated solvents or lead and is free of all carcinogens.
- Environmentally Safe / Passes TCLP Protocol A

Product Application

Petron Gear Shield® NCW is recommended for use on gear operating temperatures up to the Flashpoint of the product. Petron Gear Shield® NCW may be applied by spraying, brushing or dripping. Petron Gear Shield® NCW is designed to be sprayed through all automatic lubrication equipment.

Petron Gear Shield® NCW is available in spray cans, pails, kegs, drums, bin tanks, and tank truck.

Notes

Petron Gear Shield® NCW exceeds OEM and AGMA base oil viscosity requirements for open gear lubricants applied by intermittent spray application.

If you require further information contact Petron at: info@petroncorp.com

GEAR SHIELD® NCW

Property	Test Method	Typical Data
Color	Visual	Black
Appearance	Visual	Viscous, Semi-Fluid
Specific Gravity	ASTM D-1298	0.96
Diluent Content	% WT.	23
Copper Corrosion	ASTM D-130	4B
Flash Point		
w/Solvent	ASTM D-92 (C.O.C.)	>200° F
w/o Solvent	ASTM D-92 (C.O.C.)	>500° F
4 Ball, Weld, Kg	ASTM D-2596	400
Load Wear Index	ASTM D-2596	67
4 Ball Wear (scar diam., mm)	ASTM D-2266	0.42
FZG	FZG gear test (A/2.76/50)	>12
Load Stages Passed	DIN 51354	
Specific Mass Loss (mg/kW.h)	FZG gear test (A/2.76/50)	0.0532
30 Hr Mass Loss (mg) @ L.S. 10	DIN 51354	
	FZG extended wear test	20
	30 hrs. @ L.S. 10	
Mobility		
@ 0° C, g/s	US Steel Mobility Test	0.02
@ 0° F/ -19° C, p.s.i.	Lincoln Vent Meter	250
RUST	ASTM D-665	PASS
	4 Hr. @ 60°C, Process A & B	
Viscosity Range (Min. / Max.)		
SUS @ 210° F (UNDILUTED)		5,000 / 10,000
cSt @ 100° C (UNDILUTED)	ASTM D-445	1,000 / 2,200
SUS @ 100° F (DILUTED)		5,000 / 8,000
cSt @ 40° C (DILUTED)	ASTM D-445	900 / 1,600

IMPORTANT: Before using Gear Shield® NC, always be sure to read and follow precautions and directions for use appearing on the product container label.