



2275 McCollum Parkway, Kennesaw, GA 30144
770-426-6070 www.georgiawestern.com

U.S. Distributor of



MOV Long Life Valve Grease (Approved for Nuclear Applications)

Product Description:

MOV Long Life uses a state of the art thickener, combined with a hydrotreated Group II base oil to give outstanding performance. It was specifically formulated to offer solutions to the past problems associated with the lubrication of manual and motorized operators, and to provide a longer service life. This grease is a perfect solution for the recent cancellation of the Nebula EP grease by Exxon used in valve operators, particularly in power stations. MOV is compatible with the calcium complex thickener in Nebula EP and may be used without stripping down the operators or rigorously cleaning the valve stems of the old grease.

These lubricants are especially suited for gear boxes and valve stems, because they are expected to provide consistent torque requirements over more extended periods of time.

MOV Long Life provides above average corrosion protection, good extreme pressure and anti-wear properties, as well as being resistant to radiation at over 200 Mrads.

MOV Long Life is available in a number of NLGI Grades and is now being used in nuclear stations. Our product has been suggested by leading industry experts to lubricate all three applications on Limitorque gearboxes. In addition, MOV Long Life grease is the only grease approved by Limitorque for safety related Motor Operated Valves.

ADVANTAGES OF MOV VALVE GREASES

Wear Resistant Characteristics:

- Much better results than many current products in pin on disc testing.
- Maintains excellent pin on disc and four ball results even after heating.
- Consistent coefficient of friction in the pin on disc tests.
- Extreme pressure characteristics without zinc additives.

Stability:

- More resistance to age hardening than calcium complex greases.
- Excellent resistance to changes in consistency.
- Proven radiation resistant to at least 200 Mrads.
- Excellent corrosion protecting capabilities.
- Excellent resistance to oil separation and water washout.
- Only grease tested that passed the oven panel 96 hour test at 150C.
- Excellent resistance to both water (50%) and temperature in the roll stability test.

Safety & Environmental Benefits:

- Contains no artificial colouring agents.
- Contains no added lead, or chlorinated substances.
- Manufactured in a "Responsible Care" member facility, under ISO9002 certification.

Compatibility:

- Generally compatible with both calcium complex and lithium complex based greases.

Multipurpose:

- MOV greases can be considered a multi-purpose grease. As such, they can also be effectively utilized in other applications requiring such greases.
- Only grease said in EPRI Lube Notes to be suitable for main gearboxes, limit switches, and valve stems.

Quality Benefits:

- Based on proven technology that has been in use for over 10 years.
- Manufactured in an ISO 9002 registered North American Plant.
- Produced by one of North America's largest grease manufacturers.



2275 McCollum Parkway, Kennesaw, GA 30144
770-426-6070 www.georgiawestern.com

'MOV LONG LIFE' LUBRICANT

General Properties

	Grade 0	Grade 1	Grade 2
Thickener	Calcium sulphonate	Calcium sulphonate	Calcium sulphonate
NLGI Grade	0	1	2
Colour	tan	tan	tan
Texture	smooth	smooth	smooth
Penetration: mm/10 worked at 25 °C, ASTM D-217	370	325	280
Dropping Point: °C, ASTM D-2265	>290	>300	>318
Base Oil Viscosity: cSt, ASTM D-445 @40°	95	95	95
@100 °C	10.8	10.8	10.8

Extreme Pressure/Wear Performance

Timken OK Load: kg, ASTM D-2509	24.9	27.5	27.2
4 Ball Extreme Pressure: ASTM D-2596: load wear index, kg	55.0	62.5	63.4
weld point, kg	400	500	500
4 Ball Wear: scar diameter (mm), ASTM D-2266	0.49	0.49	0.49

Leakage/Separation Characteristics

Separation: mass %, ASTM D-1742	0.1	0.1	0.1
Oil Separation: FTM 321, cone bleed at 100 °C, 24 hours, %	4.92	4.92	3.0
Wheel Bearing Leakage: grams, ASTM D-4290	not determined	6.0	0.4

Stability

Roll Stability: % change after 2 hours at 25 °C, ASTM D-1831	+2.3	+1.9	0.0
at 25 °C plus 50% water	-1.5	-3.1	-3.6
at 77 °C	+1.9	0.9	+3.6
at 77 °C plus 50% water	-1.0	-2.5	0.0
Worked Stability: ASTM D-217, % change after 100,000 stokes	3.5	2.7	2.5
Water Washout: % at 79 °C, ASTM D-1264	5.5	3.5	3.0

Corrosion Resistance

Rust Test Rating: ASTM D-1743	pass	pass	pass
Salt Fog Rust Protection: hours, ASTM 8-117,1 mil d.f.t.	>300	>300	>300
Copper Strip Corrosion: ASTM D-4048	1b	1b	1b

Oxidation Resistance

Bearing Life: hours, ASTM D-3527.	not determined	220	240
Bomb Oxidation: psi drop after 500 hours, ASTM D-942	5.5	5.5	5.5

Low Temperature Properties

Torque: ASTM D-1478 -29 °C, gram.cm, start/run	2000/1000	2500/1500	3000/1600
---	-----------	-----------	-----------

Packaging:

MOV Long Life Valve Greases are available in 17kg pails, 55kg kegs and 180 kg drums.