

MULTIS EP



Grease



Multi purpose extreme pressure lithium grease.

APPLICATIONS

Multi purpose EP grease General Lubrication

- **Multis EP** grease from **Total** is a tough, long-lasting, multi-purpose lithium grease designed for effective and economical lubrication of transportation, mining, and construction equipment.
- **Multis EP** is a true multi purpose grease formulated for lubrication of loaded slide-bearings, ball-bearings, roller-bearings, wheel-bearings, universal joints, chassis and various shock loaded or vibrating applications.
- **Multis EP** is recommended for the lubrication of industrial equipment such as heavy-duty bearings, overloaded plain bearings, and bearings operating under intermittent or shock load conditions.

PERFORMANCES

- Can be used in transport, agriculture and off road equipment, operating in wet, dusty and/or dry conditions.
- **Multis EP 1** and **Multis EP 2** meet NLGI LB performance requirements.
- It is formulated to provide high load capacity, pumpability, reversibility, superior water resistance and outstanding protection against rust and oxidation.

CUSTOMER BENEFITS

High Film Strength

High Load Capacity

Good Performance at High and Low Temperatures

Excellent Water Resistance

Outstanding Rust and Oxidation Protection

Excellent Mechanical Stability

Excellent Reversibility

Excellent Pumpability

- Maximum resistance to lubricant film rupture due to speed, load and temperature.
- Effective extreme pressure (EP) additive reduces scuffing, scoring and seizure of bearing and gear surfaces under heavy loads, shock loads, or overloads.
- Can be used from -23°C to about 135°C.
- Minimizes water washout and corrosion of surfaces when there is water in the system.
- Multis EP is designed to provide better rust protection and longer oxidation protection than other lithium EP greases.
- Retains its structure and consistency even after severe mechanical working.
- Does not change hardness after repeated heating and cooling cycles.
- Can be used in central lubrication systems, with all the benefits of bulk handling and storage.

CHARACTERISTICS

MULTIS EP	ASTM Method	00	0	1	2
NLGI Grade	D217	00	0	1	2
NLGI Certification	D217	-	-	LB	LB
Penetration, worked 60°F	D217	402	365	320	280
Soap Type	D128	Lithium	Lithium	Lithium	Lithium
Dropping Point, °F (°C)	D2265	343 (173)	351 (177)	354 (179)	361 (183)
Oxidation Stability, psi drop/100 hrs.	D942	7	5	3	2
Rust Test	D1743	Pass (1,1,1)	Pass (1,1,1)	Pass (1,1,1)	Pass (1,1,1)
Water Wash-Out @ 175°F, %	D1264	7,8	7,8	7.5	6,8
Copper Corrosion	D1261	Pass	Pass	Pass	Pass
4-Ball scar, mm	D2266	0.48	0.47	0.45	0.40
4-Ball Weld, kg	D2596	-	-	250	250
Useful Temperature, °C		-32 to 107	-25 to 135	-23 to 135	-23 to 135
°F		-26 to 225	-13 to 275	-10 to 275	-10 to 275
Timken OK Load, lb (kg)	D2509	40 (18)	40 (18)	48 (22)	51 (23)
Color	Visual	Amber	Amber	Amber	Amber
Texture	Visual	Smooth	Smooth	Smooth	Smooth
Base Oil Data:	-----				
Viscosity, cSt @ 40°C	D445	173	190	190	191
Viscosity, cSt @ 100°C	D445	15	17	17	17
Viscosity Index	D2270	82	92	92	92
Pour, °C (°F) minimum	D97	-30 (-22)	-20 (-4)	-20 (-4)	-20 (-4)

The typical characteristics mentioned represent mean values.

Recommendation

- Selecting the correct grade of Multis EP Grease should be consistent with normal criteria applied to grease selection. The equipment manufacturer's recommendation for the correct NLGI grade should always be followed.
- Always avoid contamination of the grease by dust and/or dirt when applying. Preferably use a pneumatic pump system or cartridges.