

Mobil Unirex EP 1 & EP 2 GC/LB

Premium Quality Lithium Complex Thickened GC/LB Greases

Product Description

MOBIL UNIREX EP 1 and EP 2 GC/LB* greases are extremely versatile long-life bearing greases formulated to meet the High performance requirements of NLGI GC/LB specification. UNIREX EP branded greases are well-proven, superb performers suitable for use in a variety of industrial applications. Both the NLGI 1 and 2 grades have now been reformulated to offer even more versatility and increased features and benefits.

Features and Benefits

MOBIL UNIREX EP 2 GC/LB grease is the single most widely used Imperial Oil grease the leading member of the UNIREX EP brand of greases that have been proven and accepted in the most demanding of applications in Canadian industry.

MOBIL UNIREX EP 1 GC/LB grease combines the versatile benefits of long-life GC/LB specification with the added benefit of enhanced dispensability down to -20 °C.

Both MOBIL UNIREX EP 1 and EP 2 GC/LB have higher viscosity than most NLGI GC/LB greases also making them exceptional multipurpose greases for automotive and industrial applications.

MOBIL UNIREX EP 1 & EP 2 GC/LB are now a part of the worldwide ExxonMobil offer expanding on and adding to the reputation for innovation and performance excellence. MOBIL UNIREX EP 1 & EP 2 GC/LB have been designed by the Imperial Oil research formulation technologists and backed by the ExxonMobil worldwide technical support staff.

Features	Advantages and Potential Benefits
Formulated using an advanced lithium complex soap thickener for higher operating temperatures	Ensuring use at higher temperatures than possible with greases made with most other soap types
Excellent EP and antiwear properties	Superb equipment protection and potential equipment life extension even in severe operating conditions
Licensed against the NLGI service classification GC/LB	One grease for wheel bearing and chassis lubrication as demonstrated performance against all the stringent NLGI tests.
Potent Corrosion protection	Guarding equipment against rust and corrosion in Industrial, Heavy Duty and Automotive applications
Excellent resistance to water washout and spray-off	Uses new leading-edge polymer enrichment technology. This enhances the already excellent adhesion tendency and water washout resistance of the product line. Ensures proper lubrication and protection even in hostile work environments



Applications

MOBIL UNIREX EP 1 & EP 2 GC/LB are premium quality multi-purpose greases are NLGI 1 and 2 grades, respectively. Both products have years experience as excellent general purpose greases for heavy duty service including construction, mining, logging, cement and paper-making; all applications that can be extremely wet and dirty. MOBIL UNIREX EP 2 GC/LB is particularly popular in resource industries where heavier bodied products are needed.

MOBIL UNIREX EP 2 GC/LB has high Load Wear Index and Weld Point characteristics as determined by ASTM D 2596 and is especially recommended for the lubrication of heavy duty ball and roller bearings in shovels, drag lines, and drills for open pit mine service. It is also particularly suited for wheel bearings, grid-type flexible couplings, and general Chassis lubrication.

MOBIL UNIREX EP 1 GC/LB is Imperial Oil's primary recommendation for double spherical roller bearing and is highly recommended for gear type flexible couplings where grease is recommended.

Both MOBIL UNIREX EP 1 & EP 2 GC/LB are recommended for wheel bearing and chassis lubrication as demonstrated by performance against the stringent NLGI service classification tests.

Both MOBIL UNIREX EP 1 & EP 2 GC/LB are recommended for hand packed or grease gun applications where greasing intervals are extended and minimal leakage is required. The combination of wear protection and leading edge polymer provide advanced adhesion and wear protection - even where moisture is at its worst.

Imperial Oil' Research developed and field tested this grease in demanding applications to ensure the long history of performance in heavy industry is met with the new technology

Performance Features

Adhesion & Water Resistance

MOBIL UNIREX EP 1 & EP 2 GC/LB have exceptional water tolerance, allowing moderate water absorption with only a minor change in penetration. Even after prolonged churning with water, MOBIL UNIREX EP 1 & EP 2 GC/LB greases retains consistency, adhesion and rust inhibiting properties. MOBIL UNIREX EP 1 & EP 2 GC/LB are formulated with a new polymer enhancement technology offering even greater adhesion for exceptional spray off resistance and resistance to water washout.

High Dropping Point

MOBIL UNIREX EP 1 & EP 2 GC/LB have a high dropping point (300°C) allowing use at higher temperatures than possible with greases made with most other soap types. MOBIL UNIREX EP 1 & EP 2 GC/LB are recommended for use at temperatures up to 170°C and intermittent temperature excursions up to 200°C.

Rust and Corrosion Protection

MOBIL UNIREX EP 1 & EP 2 GC/LB provide superior protection against rust and metal corrosion as determined using ASTM D1743, EMCOR (ASTM 6138) and a 24-hour Copper Corrosion test (ASTM D 4048).

Extreme Pressure/Wear Protection

MOBIL UNIREX EP 1 & EP 2 GC/LB contain additives combining extreme pressure resistance and wear protection under severe shock loading conditions. See the Timken Load and 4-Ball Wear/EP data on the Typical Properties table. Excellent load-carrying and anti-wear properties combine to ensure MOBIL UNIREX EP 1 & EP 2 GC/LB are capable of protecting shock loaded bearings to the limits of the metal's capacity for severe vibration and impact loads

Due to continual product research and development, the information contained herein is subject to changes without notification. Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at www.imperialoil.ca/mobil or by contacting Lubricants and Petroleum Specialities, Technical Services, Technical Help Desk: 1-800-268-3183

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Typical Properties

(1) Hand grease gun dispensing under average conditions. Automatic system limitations may be at a higher temperature.

The data above is representative of production. Some qualities are controlled by manufacturing specifications while others are not. All may vary within modest ranges.

	Mobil Unirex EP 2 GC/LB	Mobil Unirex EP 1 GC/LB
NLGI Grade	2	1
NLGI Service Classification	GC/LB	GC/LB
Thickener Type	Li-Complex	Li-Complex
Colour, Visual	green	green
Operating Temp. Range, °C	-30 to 170	-30 to 170
Minimum Dispensing Temp., °C (1)	-15	-20
Penetration, Worked, @ 25°C ASTM D 217 mm/10	280	325
Dropping Point, °C, ASTM D 2265	300	280
Viscosity of Oil, ASTM D 445		
cSt @ 40°C	220	220
Apparent Viscosity, P at -10°C and 20s ⁻¹	3000	1500
Oxidation Stability 100 hr. pressure delta	1	1
Timken OK Load, ASTM D 2509, kg. (lb)	27 (60)	27 (60)
4-Ball Wear Test, ASTM D 2266, Scar, mm	0.5	0.5
4 Ball EP, Weld, kg. (Minimum)	315	315
Corrosion Prevention, ASTM D 1743, Rating	Pass	Pass
Copper Strip Corrosion, ASTM D 4048	1A	1A
Water Spray Off, wt%	30	55
Water Washout, @ 79°C, wt%	2.1	5
EMCOR, 20% SSW	0,0	0,0

Precautions

Always protect MOBIL UNIREX EP 1 & EP 2 GC/LB greases from contamination by dust or water. MOBIL UNIREX EP 1 & EP 2 GC/LB grease are manufactured from high quality petroleum base stocks carefully blended with selected soaps and additives. As with all of our products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. High-pressure injection of any grease under the skin can cause serious delayed soft tissue damage and should be treated immediately by a physician. To avoid injection injuries, inspect greasing equipment regularly for worn hoses and fittings. Keep fingers away from the nozzle and ensure the nozzle is firmly in place before discharging the grease. Please refer to the Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation

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