



Mobilgrease XHP™ 220 Series

Grease Mobil, United States

Product Description

Mobilgrease XHP™ 220 greases are extended service lithium complex greases intended for a wide variety of applications and severe operating conditions. These greases were designed to outperform conventional products by applying cutting edge, proprietary, lithium complex manufacturing technology. They are formulated to provide excellent high temperature performance with superb adhesion, structural stability and resistance to water contamination. These greases have a high level of chemical stability and offer excellent protection against rust and corrosion. These greases feature high dropping points and maximum recommended operating temperature of 140° C (284°F). Mobilgrease XHP 220 greases are available in NLGI grades 00, 0, 1, 2 and 3 with an ISO VG 220 base oil viscosity.

Mobilgrease XHP 220 greases are designed for a wide range of applications including the industrial, automotive, construction and marine sectors. Their performance features make them ideal choices for operating conditions including high temperature, water contamination, shock loading and extended re-lubrication operations. Mobilgrease XHP 222 Special is an extreme pressure grease fortified with 0.75% molybdenum disulfide that provides protection from wear under conditions pivoting and other conditions that lead to loss of oil film.

Features and Benefits

Mobilgrease XHP 220 greases are leading members of the Mobilgrease brand of products, which have gained a reputation for innovation and performance excellence. Mobilgrease XHP 220 greases are high performance products designed by our formulation technologists and backed by our world-wide technical support staff.

A key factor in the excellent adhesion and cohesion properties and high drop point of Mobilgrease XHP 220 greases is the proprietary manufacturing technology developed at our research facilities and adopted by our modern manufacturing facilities. These products use specially selected additives to provide excellent oxidation stability, rust and corrosion control, resistance to water contamination as well as anti-wear and EP protection. Mobilgrease XHP 220 Series products offer the following features and potential benefits:

Features	Advantages and Potential Benefits
Superb resistance to water washout and spray-off	Helps assure proper lubrication and protection even in the most severe water exposure conditions
Highly adhesive and cohesive structure	Excellent grease tenacity, helps reduce leakage and extend re-lubrication intervals for reduced maintenance requirements
Excellent rust and corrosion resistance	Protection of lubricated parts even in hostile aqueous environments

Features	Advantages and Potential Benefits
Very good resistance to thermal, oxidative and structural degradation at high temperature	Helps extend grease life and enhance bearing protection in high temperature applications helping to reduce maintenance and replacement costs
Very good anti-wear and EP performance	Reliable protection of lubricated equipment, even under conditions of high sliding with potential for extended equipment life and reduced unanticipated downtime
Broad multi-purpose application	Provides potential for inventory rationalization and reduced inventory costs

Applications

Mobilgrease XHP 220 greases are used in a wide range of equipment including industrial, automotive, construction and marine applications. Their blue color enables easy verification of application:

Mobilgrease XHP 005 and 220 are softer, high-temperature greases recommended by ExxonMobil for centralized grease application systems, gear lubrication, and where extreme-cold-temperature pumpability is important.

Mobilgrease XHP 221 is recommended by ExxonMobil for use in industrial and marine applications, chassis components and farm equipment. It provides excellent low temperature performance.

Mobilgrease XHP 222 is recommended by ExxonMobil for industrial and marine applications, chassis components and farm equipment. Its sticky formulation stays in applications longer.

Mobilgrease XHP 223 is recommended by ExxonMobil for applications where good high temperature and anti-leakage properties are required. It is particularly recommended for severe truck wheel bearing applications or for rolling element bearings subject to vibration, or where higher speeds require a grease with higher consistency to provide channeling characteristics.

Mobilgrease XHP 222 Special contains 0.75% molybdenum disulfide, is grey in color and is recommended by ExxonMobil for moderate duty service in industrial applications, chassis components and farm equipment. It also finds application in king pins, U-joints, fifth wheels and bucket pins.

Specifications and Approvals

Mobilgrease XHP 220 Series meets or exceeds the requirements of	005	220	221	222	223	222 Special
DIN 51825: (2004-06)			KP1N-20	KP2N-20		

Mobilgrease XHP 220 Series has the following builder approvals:	005	220	221	222	223	222 Special
Fives Cincinnati		P-79	P-72	P-64		

Typical Properties

Mobilgrease XHP	005	220	221	222	223	222 Special
NLGI Grade	00	0	1	2	3	2
Thickener Type	Li-Complex	Li-Complex	Li-Complex	Li-Complex	Li-Complex	Li-Complex
Color, Visual	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Grey-Black
Molybdenum DiSulfide, wt%	--	--	--	--	--	0.75%
Penetration, Worked, 25° C, ASTM D 217	415	370	325	280	235	280
Dropping Point, °C, ASTM D 2265	--	270	280	280	280	280
Viscosity of Oil, ASTM D 445						
cSt @ 40° C	220	220	220	220	220	220
4-Ball Wear Test, ASTM D 2266, scar, mm	0.50	0.50	0.5	0.5	0.5	0.5
4-Ball Weld Load, ASTM D 2596, kg	315	315	315	315	315	315
Timken OK Load, ASTM D 2509, lb	40	40	40	40	40	40
Bomb Oxidation, ASTM D 942, Pressure drop at 100 hrs, kPa (psig)	35 (5)	35 (5)	35 (5)	35 (5)	35 (5)	35 (5)
Corrosion Prevention, ASTM D 1743	Pass	Pass	Pass	Pass	Pass	Pass
Rust Protection, IP 220-mod., Distilled Water Washout	0,0	0,0	0,0	0,0	0,0	0,0
Copper Strip Corrosion, ASTM D 4048	1B	1B	1B	1B	1B	1B
Penetration Consistency Change, Roll Stability, ASTM D 1831, mm/10	--	-15	-15	0	0	0

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are

followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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Mobilux™ EP 0, 1, 2, 3, 004 and 023

Mobil Grease, United States

Grease

Product Description

Mobilux™ EP 0, 1, 2, 3, 004 and 023 products are a high performance family of four general-purpose industrial greases and two special-duty semi-fluid greases. These lithium hydroxystearate greases are formulated to provide extra protection against wear, rusting and water washout. They are available in NLGI grades ranging from 00 to 3, with base oil viscosities ISO VG 150 and 320.

Mobilux EP 0, 1, 2 and 3 greases are recommended for most types of industrial applications including heavy-duty applications where high unit pressures or shock loads are present. These greases provide excellent protection against rust and corrosion and resist water wash-out which makes them particularly suitable for equipment where moist or wet conditions are common. Mobilux EP 0 and 1 are suitable for centralised systems. Mobilux EP 2 and 3 are general-purpose greases. The recommended operating temperature range is from -20°C to 130°C but they may be used at higher temperatures if the lubrication frequency is increased accordingly.

Mobilux EP 004 and Mobilux EP 023 are particularly suitable for the lubrication of enclosed gears and bearings in poorly sealed gear cases they can also be used in many other industrial applications where conventional gear oils cannot be retained in gear cases, chain cases, etc. because of leakage due to worn or missing seals. The recommended operating temperature range is -20 to 120°C for Mobilux EP 004 and -20 to 120°C for Mobilux EP 023.

Features and Benefits

Mobilux EP greases have a long history of proven performance and have demonstrated good performance in the areas of corrosion protection, low temperature pumpability and high temperature service life. A Timken OK load of 40 lb illustrates their load carrying and extreme pressure capability.

- Reduced wear under heavy or shock loading and vibration for good equipment reliability and availability
- Protection against rust and corrosion and resistance to water washout for equipment protection and good lubrication even in presence of water
- Extended bearing life potential in wet environments for reduced bearing costs and unanticipated downtime
- Good pumpability in centralised systems (Mobilux EP 0 and 1)
- Effective leakage control (Mobilux EP 004 and Mobilux EP 023)

Applications

- Mobilux EP 0 and EP 1 provide good low temperature pumpability and are suitable for centralised lubrication systems and other applications where low temperature performance is required.
- Mobilux EP 2 is recommended for multipurpose applications in antifriction and plain bearings, bushings and pins under normal operating conditions.
- Mobilux EP 3 is a stiffer NLGI grade 3 grease recommended for applications where maximum protection against penetration of water or solid contaminants is required.
- Mobilux EP 004 and Mobilux EP 023 are particularly suitable for the lubrication of enclosed gears and bearings in poorly sealed gear cases on most underground mining machinery with the exception of electric motor gearings. Mobilux EP 004 and Mobilux EP 023 can also be used in many other industrial applications where conventional gear oils cannot be retained in equipment such as gear cases, chain cases, because of leakage due to worn or missing seals. Mobilux EP 004 passes the SEW 1008 hour gear test requirement DR.EM.203 mod.

Specifications and Approvals

Mobilux EP meets or exceeds the requirements of:	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2	Mobilux EP 3	Mobilux EP 004	Mobilux EP 023
DIN 51825		KP1K-20	KP2K-20	KP3K-20		
DIN 51826	GP0G-20				GP00G-20	GP000G-20

Mobilux EP has the following builder approvals	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2	Mobilux EP 3	Mobilux EP 004	Mobilux EP 023
SEW Eurodrive/ PS C Gears					X	

Typical Properties

	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2	Mobilux EP 3	Mobilux EP 004	Mobilux EP 023
NLGI Grade	0	1	2	3	00	000
Thickener Type	Lithium	Lithium	Lithium	Lithium	Lithium	Lithium
Color, Visual	Brown	Brown	Brown	Brown	Brown	Brown
Penetration, Worked, 25°C, ASTM D 217	370	325	280	235	415	460
Viscosity of Oil, ASTM D 445						
cSt @ 40°C	160	160	160	160	160	320

	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2	Mobilux EP 3	Mobilux EP 004	Mobilux EP 023
Timken OK Load, ASTM D 2509, lb	40	40	40	40	40	40
4-Ball Wear, ASTM D 2266, Scar, mm	0.4	0.4	0.4	0.4	0.5	0.4
4-Ball Weld Load, ASTM D 2596, Kg	250	250	250	250	250	250
Dropping Point, D 2265, C	190	190	190	190		
Rust Protection, ASTM D 6138, Distilled Water	0-0	0-0	0-0	0-0	0-0	0-0

Health and Safety

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