

# Mobilgrease XHP

## Grease

### Product Description

Mobilgrease XHP Series products are extra high performance lithium complex greases intended for a wide variety of applications and severe operating conditions. These greases were designed to outperform conventional products by applying leading edge, proprietary, lithium complex manufacturing technology. They are based on high quality paraffinic mineral oils and are manufactured and 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. The greases feature high dropping points and maximum recommended operating temperature for the Series is 175° C. Mobilgrease XHP Series greases are available in NLGI grades 3, 2 and 1 and with base oil viscosities ranging from ISO VG 100 to ISO VG 460.

Mobilgrease XHP 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 severe operating conditions including high temperature, water contamination, high loads and shock loading and extended re-lubrication operations. Mobilgrease XHP 222 Special is an extreme pressure grease containing molybdenum disulphide that provides protection from wear under shock loads and fretting conditions.

### Features & Benefits

Mobilgrease XHP greases are leading members of the Mobilgrease brand of products, which has gained a reputation world-wide for innovation and performance excellence. Mobilgrease XHP greases are state-of-the-art 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 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 & corrosion control, resistance to water contamination as well as anti-wear and EP protection. Mobilgrease XHP Series products offer the following features and potential benefits:

Features	Advantages and Potential Benefits
Superb resistance to water washout and spray-off	Assures proper lubrication and protection even in the most severe water exposure conditions
Highly adhesive and cohesive structure	Excellent grease tenacity, reduced leakage and extended re-lubrication intervals for reduced maintenance requirements.
Excellent rust and corrosion resistance	Protection of lubricated parts even in hostile aqueous environments, especially acidic water
Very good resistance to thermal, oxidative and structural degradation at high temperature	Extended grease life and enhanced bearing protection in high temperature applications offers reduced maintenance and replacement cost benefits.
Very good anti-wear and EP performance	Reliable protection of lubricated equipment, even under conditions of high sliding and shock loading with potential for extended equipment life and reduced unanticipated downtime
Broad multi-purpose application	Provides potential for inventory rationalisation and reduced inventory costs



## Applications

Mobilgrease XHP greases are used in a wide range of equipment including industrial, automotive, construction and marine applications:

- Mobilgrease XHP 103 is recommended for severe applications where good high temperature and anti-leakage properties are required. It is particularly recommended for electric motor bearings, severe truck wheel bearing applications or for rolling element bearings subject to vibration
- Mobilgrease XHP 221 provides a heavier lubrication film thickness than Mobilgrease HP 103 while the NLGI 1 Grade ensures good low temperature performance
- Mobilgrease XHP 222 is recommended for industrial and automotive antifriction bearings, chassis components, universal joints and disc brake wheel bearings. It finds particular application in passenger cars, light trucks, taxi fleets and farm equipment. It is also recommended for marine, paper mill, sugar mill and mining applications
- Mobilgrease XHP 461 is recommended for construction and mining equipment, paper and steel mills and other heavy-duty applications
- Mobilgrease XHP 222 Special and is used in chassis components, clutch bearings, ball joints of suspension and steering systems in all kinds of passenger cars, trucks, farm tractors, contractor, construction, earth-moving and mobile equipment. It also finds application in king pins, U-joints, fifth wheels and bucket pins

## Typical Properties

Mobilgrease XHP	103	221	222	223	461	222 Special
NLGI Grade	3	1	2	3	1 1/2	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
Penetration, Worked, 25° C, ASTM D 217	235	325	280	235	305	280
Dropping Point, °C, ASTM D 2265	280	280	280	280	280	280
Viscosity of Oil, ASTM D 445						
cSt @ 40° C	100	220	220	220	460	220
Penetration Consistency Change, Roll Stability, ASTM D 1831, mm/10	10	10	- 8	10	10	- 8
4-Ball Wear Test, ASTM D 2266, scar, mm	0.5	0.5	0.5	0.5	0.5	0.5
4-Ball Weld Load, ASTM D 2509, Kg	315	315	315	315	315	315
Timken OK Load, ASTM D 2509, lb	45	45	45	45	45	45
Bomb Oxidation, ASTM D 942, Pressure drop at 100 hrs, kPa	35	35	35	35	35	35
Corrosion Prevention, ASTM D 1743	Pass	Pass	Pass	Pass	Pass	Pass
Emcor Rust, IP 220, Acidic Water	0	0	0	0	0	0
Rust Protection, IP 220-mod, Distilled Water Washout	0	0	0	0	0	0
Copper Strip Corrosion, ASTM D 4048	1A	1A	1A	1A	1A	1A
Water Spray Resistance, ASTM D 4049, % Spray-off	15	15	15	15	15	15
Water Washout, ASTM D 1264, wt % loss at 79° C	5	8	5	5	5	5



## Health & 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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