

# KOYOTO XTREME PROTECT GREASE EP 3 SERIES

High Performance Lithium Complex Extreme Pressure Greases



## Product Data Sheet

### Product Description

KOYOTO XTREME PROTECT GREASE EP 3 series are high performance greases, formulated with lithium complex based thickeners, high viscosity index base oils and extreme pressure additive system to provide excellent protection against wear, rusting and water washout. They are available in NLGI grades ranging from 00 to 3 with base oil viscosity of ISO VG 220. They are suitable for most types of Automotive and Industrial applications, including heavy-duty Marine applications where high temperatures, heavy loads and extreme unit pressures are present. EP 1, 2, 3 & 2 Moly greases are suitable for operating temperatures range from -20°C to 140°C, while EP 00 & 0 greases are suitable for operating temperatures range from -25°C to 130°C.

### Features & Benefits

- Excellent resistance to water washout & Highly adhesive and cohesive grease structure - resists washout of grease in equipment and provides good lubrication even in presence of water.
- Excellent Oxidation and Thermal stability - protects against deposit formation at high operating temperatures and oil thickening, thus maintains the life and performance of grease.
- Outstanding load carrying capacity - reduces wear under heavy or shock loading and vibrations, for good equipment reliability and performance.
- Excellent corrosion protection - protects bearing surfaces against corrosion, even when the grease is contaminated with water.
- Outstanding mechanical stability – resists grease softening in application, where extended mechanical working and high vibrations leads to subsequent loss of lubrication performance and leakage.

### Application

**KOYOTO XTREME PROTECT GREASE EP 3 are suitable for most types of Marine, Automotive & Industrial**

- KOYOTO XTREME PROTECT GREASE EP 3 00, EP 0 and EP 1 are suitable for centralized lubrication systems and other applications where low temperature performance and effective leakage control are required.
- KOYOTO XTREME PROTECT GREASE EP 3 2 and EP 3 are suitable for antifriction and plain bearings, bushings and pins, operating under moderate to severe load conditions & in applications with high moisture ingress.
- EP 2 Moly, fortified with MoS<sub>2</sub> is suitable for use in bucket pins, pivot pins & fifth wheels.

### Typical Characteristics

KOYOTO Xtreme Protect Grease EP	Test Method	Units	EP 00	EP 0	EP 1	EP 2	EP 3	EP 2 Moly
NLGI Grade	ASTM D 217	--	00	0	1	2	3	2
Thickener Type	--	--	Li-Cx	Li-Cx	Li-Cx	Li-Cx	Li-Cx	Li-Cx
Penetration, Worked @ 25 °C	ASTM D 217	0.1mm	400-430	355-385	310-340	265-295	220-250	265-295
Viscosity @ 40 °C	ASTM D 445	cSt	220	220	220	220	220	220
Dropping Point	ASTM D 566	°C	-	220	230	230	230	230
4-Ball Wear, Scar	ASTM D 2266	mm	0.5	0.4	0.4	0.4	0.4	0.4
4-Ball Weld Load	ASTM D 2596	Kg	310	315	315	315	315	380

*The above figures are typical of blends with normal production tolerance and do not constitute a specification.*