



GEAR OILS

Meropa®

**Description**

Meropa lubricants are premium-quality gear lubricants that have been specially developed to meet the demanding load-carrying requirements of gear manufacturers. Meropa lubricants are manufactured from high-quality base oils and have low pour points. They contain an additive combination that enhances oiliness, extreme pressure, and antiwear properties. Meropa lubricants have a high oxidation, thermal, and hydrolytic stability, good water-separating characteristics, good air release and antifoam properties, and prevent metal corrosion and rusting.

Typical Characteristics

ISO Viscosity Grade	68	100	150	220	320	460	680
Code	042319	044591	042320	042321	042324	042325	042342
Density at 15°C, kg/l	0.88	0.89	0.89	0.90	0.90	0.90	0.92
Flash point, COC, °C	225	230	230	240	240	250	250
FZG test (A/16.6/140), failure load stage	>12	>12	>12	>12	>12	>12	>12
Pour point, °C	-30	-27	-24	-21	-21	-15	-15
Rust test, synthetic seawater	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Viscosity, kinematic, mm ² /s (cSt) at 40°C	68	100	150	220	320	460	680
at 100°C	8.6	11.2	14.5	18.8	24.0	30.3	37.5
Viscosity index	96	97	95	95	95	95	90

Recommended Uses

Meropa lubricants are recommended for all heavy-duty enclosed gear drives containing spur gears, helical gears, and bevel gears as well as spiral bevel gears, hypoid gears, and worm gears, including those operating at high speeds or very high loads. Meropa lubricants can also be used for chain drives, sprockets, plain and antifriction bearings, guide ways and flexible couplings where service conditions require the use of either a mild EP or an EP-type gear lubricant. Meropa lubricants have been formulated to meet the most severe service requirements of gear drive manufacturers. Meropa 68 to 320 meet the US Steel 224 specification and the 68 to 680 grades meet the David Brown ET 33/80 specification. Meropa also meets DIN 51517/3 and AGMA 250.04 as well as Cincinnati Milacron P35, P59, P63, P74, P77 and P78.

Performance Benefits**1. Load-carrying capacity**

Offers extremely high load-carrying capacity, has excellent antiwear properties, and cushions shock loads.

2. Thermal and Oxidation Stability

Keeps sludge formation in circulation systems to a minimum and avoids frequent cleaning, thereby reducing expensive downtime. Recommended for continuous service for temperatures between 120-130°C.

3. Hydrolytic Stability

Prevents sludge formation when in contact with water, and retains compounding level for prolonged periods of time even in the presence of water.

4. Water Separation

Assures speedy separation of water in circulating systems.

5. Non-Foaming Characteristics

Readily dissipates foam under the most unfavorable conditions, such as violent agitation in the gear case.

6. Air Release Properties

Ensures fast release of entrained air bubbles which may be formed by highly rotating gear components.

7. Rust Preventing Properties

Prevents rusting of gears and bearings in the presence of water.

8. Non-Corrosive to Copper and Copper Alloys

Minimizes wear-rates of copper alloys used in worm gears and bearings.