



MEROPA[®] AQUAGEAR[®] EP

220, 320, 460

PRODUCT DESCRIPTION

Meropa[®] Aquagear[®] EP oils are gear oils designed to emulsify water. They are designed to meet the Joy Mining Machinery requirements for industrial EP gear oils that are used in enclosed gear sets in longwall mining equipment, and can be used in many gearboxes of other mining equipment and construction equipment operating in contaminated, wet environments.

CUSTOMER BENEFITS

Meropa Aquagear EP oils deliver value through:

- **Long equipment life** — Effective sulfur-phosphorus extreme-pressure additives help provide high film thickness that protects gear teeth from wear and premature failure.
- **Long oil life** — Special additives and base oil formulations help prevent product degradation when operating in severe conditions that lead to rapid oxidation and thermal stress - promoting long service life of the oil.
- **Flexibility to use in wet conditions** — Quickly forms stable emulsions with water to help prevent separated water from corroding equipment, and minimizes water corrosion on either steel (rust) or nonferrous metals (including copper and its alloys) in gear sets.
- **Cold weather reliability** — Pour point is depressed to provide good cold flow performance at low temperature conditions. These gear oils will flow at approximately 5 - 10°C above their pour point temperatures.

FEATURES

Meropa Aquagear EP oils are multipurpose gear lubricants.

They are formulated with highly refined, high viscosity index paraffinic base oils and a sulfur-phosphorus additive system. Meropa Aquagear EP oils contain extreme pressure, antiwear and emulsibility additives; oxidation, rust, corrosion and foam inhibitors; a pour point depressant; and a metal deactivator to protect copper or copper alloys from corrosion.

They are designed to meet or exceed the performance requirements of Joy Mining Machinery specifications for enclosed gear sets used in longwall mining equipment.

Meropa Aquagear EP oils have high film strength and load-carrying capacity. Gear teeth are protected from wear, surface distress, and premature failure.

They provide maximum thermal and oxidation stability to help prevent degradation under severe operating conditions and promote long lubricant life.

They are designed to form a stable emulsion with contaminating water.

APPLICATIONS

Chevron recommends Meropa Aquagear EP oils for use in Joy Mining Machinery calling for industrial EP gear oils as used in enclosed gear sets in longwall mining equipment. In addition, they can be used in gearboxes of other mining equipment and construction equipment operating in contaminated, wet environments.

Meropa Aquagear EP oils meet the specifications of:

- **Joy** TO-MEP (ISO 220), TO-HEP (ISO 320) and TO-HD (ISO 460).

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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TYPICAL TEST DATA

ISO Grade	220	320	460
<i>Product Number</i>	278013	278014	278015
<i>SDS Number</i>	23514	23514	23514
API Gravity	28.1	26.0	26.0
Viscosity, Kinematic cSt at 40°C cSt at 100°C	220 19.9	320 27.2	454 34.0
Viscosity, Saybolt SUS at 100°F SUS at 210°F	1158 101	1689 134	2409 166
Viscosity Index	104	113	111
Flash Point, °C(°F)	248(478)	244(471)	242(468)
Pour Point, °C(°F)	-24(-11)	-18(0)	-18(0)
Falex EP, ASTM D3233, lb	3750+	3750+	3750+
FZG Pass Stage, DIN 51364	12	12	12
Oxidation, ASTM D2893, % Viscosity Increase	3.2	3.6	5.1
Emulsibility, ASTM D1401, mL H ₂ O at 48 h	0	0	0
Foaming, ASTM D892 Tendency, mL Stability, mL	0 0	0 0	0 0
Corrosion, Copper Strip, 3 h at 100°C	1B	1B	1B
Rust Prevention, ASTM D665	Pass	Pass	Pass

Minor variations in product typical test data are to be expected in normal manufacturing.

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