

# CLARITY<sup>®</sup> SYNTHETIC EA GEAR OIL 100, 150

### **PRODUCT DESCRIPTION**

Clarity<sup>®</sup> Synthetic EA Gear Oils are readily biodegradable high performance gear oils that meet EPA Vessel General Permit (VGP) requirements for environmentally acceptable lubricants. They are designed to give maximum protection in industrial gear applications on vessels and in environmentally sensitive areas.

#### **CUSTOMER BENEFITS**

Clarity Synthetic EA Gear Oils deliver value through:

- Environmentally acceptable Meets the requirements of the EPA Vessel General Permit (VGP) for biodegradation, low toxicity and low bioaccumulation.
- **Premium performance** Ashless formulation provides excellent protection against wear of industrial gears, provides rust and corrosion protection, water separability, foam inhibition, EP protection and shear stability.
- Long oil life Outstanding ability of the synthetic base stock to withstand oxidation at high operating temperatures results in maximum service life for the oil relative to vegetable-based readily biodegradable products.
- Excellent low temperature pumpability Specifically developed with high viscosity index to ensure good fluidity for low operating temperatures.

#### **FEATURES**

These lubricants are readily biodegradable, non-bioaccumulative, and minimally toxic. In the event of a spill, the product biodegrades by more



than 60% within 28 days, minimizing the impact to the environment.

Clarity Synthetic EA Gear Oils are designed to give maximum protection in industrial gear equipment used in applications requiring a high performance gear oil and have environmental concerns such as off-shore marine or Oil and Gas, construction in or near water, mining and power utility operations as well as other high-performance industrial applications.

Clarity Synthetic EA Gear Oils are formulated with synthetic base stock and an ashless, zinc-free additive system that provide exceptional oxidation stability, water separability, foam suppression, and protection against wear, rust and corrosion.

Clarity Synthetic EA Gear Oils are high VI synthetic products which allow for operation over a wide temperature range.

Clarity Synthetic EA Gear Oils are designed to the performance requirements of conventional antiwear/ extreme pressure gear oils, while providing an additional benefit in case of leaks or incidental discharge to the environment.

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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#### **APPLICATIONS**

Clarity<sup>®</sup> Synthetic EA Gear Oils<sup>1</sup> are designed to give maximum protection in industrial gear equipment used on vessels and in environmentally sensitive areas.

Clarity Synthetic EA Gear Oils meet the requirements of:

- Aegir
- AGMA EP 9005-E02
- Berg
- Blom+Voss
- Chesterton
- Cincinnati Milacron P-76 (ISO 100), P-77 (ISO 150)
- David Brown S1.53.101
- DIN 51517, Part 3
- IHC Merwede
- James Walker
- Kamewa
- Kemel
- Ortlinghaus
- Schottel
- U.S. Steel 224
- Wärtsilä
  - 1 Chevron Clarity EA Gear Oils are rebrands of Terresolve Technologies, Ltd. products as follows:

Chevron	Terresolve Technologies	
Clarity <sup>®</sup> Synthetic EA Gear Oil 100	ENVIROLOGIC <sup>®</sup> 210	
Clarity <sup>®</sup> Synthetic EA Gear Oil 150	ENVIROLOGIC <sup>®</sup> 215	

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Clarity Synthetic EA Gear Oils are miscible with common mineral based gear oils, however, following good practice, in-service oils should be completely drained to avoid any risk of additive incompatibility and ensure that the full performance benefits are achieved.

Do not use in high pressure systems in the vicinity of flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.

## TYPICAL TEST DATA

ISO Grade	100	150
Product Number	223061	223060
SDS Number	35642	35642
API Gravity	36.8	36.8
Viscosity, Kinematic cSt at 40°C cSt at 100°C	100.0 18.0	150.0 23.0
Viscosity Index	199	183
Flash Point, °C(°F)	185(365)	185(365)
Pour Point, °C(°F)	-39(-38)	-39(-38)
Copper Corrosion, ASTM D130, 3 hrs. at 100°C	1b	1b
Rust Test, ASTM D665B Synthetic Sea water	Pass	Pass
Water Separability, ASTM D1401 at 82°C	<u>&lt;</u> 3 ml emulsion at 30 minutes	<3 ml emulsion at 30 minutes
FZG, DIN 51354, Fail Load Stage	>12	>12
Timken OK Load, ASTM D2782, lb	>60	>60
Elastomer Compatibility, ASTM D471 Buna-N (100°C, 168 hrs) Viton (150°C, 168 hrs)	Pass Pass	Pass Pass
Biodegradability, ASTM D7373, %	>60	>60
Aquatic Toxicity Fathead minnow, OECD 203, mg/L Daphnia magna, OECD 202, mg/L Algae, OECD 201, mg/L	>1000 >130 >120	>1000 >130 >120
Bioaccumulation	Negative	Negative

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

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