



marine lubricants

# Clarity<sup>®</sup> Synthetic EA Gear Oil



## Description

Clarity<sup>®</sup> Synthetic EA Gear Oils are readily biodegradable high-performance gear oils that meet EPA Vessel General Permit (VGP 2013) requirements for environmentally acceptable lubricants. They are designed to give maximum protection in industrial gear applications on vessels and in environmentally sensitive areas.

Clarity Synthetic EA Gear Oils are formulated with synthetic base stock and an ashless, zinc-free additive system that can provide good oxidation stability, water separability, foam suppression, and protection against wear, rust and corrosion. They are high VI synthetic products which allow for operation over a wide temperature range.

## Typical Characteristics

MPID	803121
<b>VG 100</b>	
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	100
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s	18
Viscosity Index	199
Flash point, COC, °C	185
Pour Point, °C	-39
Copper Corrosion 3hrs/100°C	1B
Rust test, distilled water	PASS
Rust test, salt water	PASS
Water separability at 82°C	<3 ml emulsion at 30 minutes
Foam Seq I, ml	50/0
Foam Seq II, ml	50/0
Foam Seq III, ml	50/0
FZG, load failure stage	>12
Timken OK Load, lb	>60
Elastomer Compatibility	
Buna-N (100°C, 168 hrs)	Pass
Viton (150°C, 168 hrs)	Pass
Biodegradability, %	>60
Aquatic Toxicity	
Fathead minnow, OECD 203, mg/L	>1000
Daphnia magna, OECD 202, mg/L	>130
Algae, OECD 201, mg/L	>120
Bioaccumulation	NEGATIVE



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### Recommended Applications

These lubricants are readily biodegradable, non-bio accumulative, 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 Oil is designed to give maximum protection in marine gear equipment used on vessels and in environmentally sensitive areas.

### Clarity Synthetic EA Gear Oil Is Approved For:

<input checked="" type="checkbox"/> <b>Aegir</b>	<input checked="" type="checkbox"/> <b>IHC Merwede</b>
<input checked="" type="checkbox"/> <b>AGMA</b> EP 9005-E02	<input checked="" type="checkbox"/> <b>James Walker</b>
<input checked="" type="checkbox"/> <b>Berg</b>	<input checked="" type="checkbox"/> <b>Kamewa</b>
<input checked="" type="checkbox"/> <b>Blohm+Voss</b>	<input checked="" type="checkbox"/> <b>Kemel</b>
<input checked="" type="checkbox"/> <b>Cincinnati Milacron</b> P-76	<input checked="" type="checkbox"/> <b>Ortlinghaus</b>
<input checked="" type="checkbox"/> <b>David Brown</b> S1.53.101	<input checked="" type="checkbox"/> <b>Schottel</b>
<input checked="" type="checkbox"/> <b>DIN</b> 51517 (Part 3)	<input checked="" type="checkbox"/> <b>Wärtsilä</b>

*Clarity Synthetic EA Gear Oil is 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 near flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.*

### Performance Benefits

#### 1. Environmentally Acceptable

Meets the requirements of the EPA Vessel General Permit (VGP 2013) for biodegradation, low toxicity and low bioaccumulation.

#### 2. Premium Performance

Ashless formulation helps to provide protection against wear of industrial gears, as well as rust and corrosion protection, water separability, foam inhibition, EP protection and shear stability.

#### 3. Long Oil Life

Good 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.

#### 4. Low Temperature Pumpability

Specifically developed with high viscosity index to help ensure good fluidity for low operating temperatures.



**Disclaimer.** Data provided in this PDS is based on standard tests under laboratory conditions and is indicative only. Minor variations which do not affect product performance are expected in normal manufacturing. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Recommendations differ between engine manufacturers so always consult your manual. Neither Chevron nor its subsidiaries make any warranty or representation as to the accuracy or completeness of this PDS and neither Chevron nor its subsidiaries accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS. (March 2019)