GGRXHVGO-10

HYDRAULIC GEAR OIL



OVERVIEW

The Groxx GGRXHVGO-10 (ISO VG 460 / DIN 51517-3 CLP grade) is an ultra-high-viscosity, heavy-duty industrial gear lubricant engineered specifically for heavy-load gearboxes, primary traction hoist drive reducers, and high-pressure industrial machinery.

KEY FEATURES

- **Heavy-Duty Extreme Pressure (EP) Protection**: Delivers exceptional load-carrying capability with an FZG Gear failure load stage exceeding Stage 12 and a four-ball sintering load of 2453 N, preventing gear tooth scoring under heavy shock loads.
- **Superior Anti-Wear & Shear Stability**: Maintains a stable kinematic viscosity of 455.7 mm^2/s at 40°C even after rigorous shearing tests, ensuring long-term film strength without thermal breakdown.
- **Thermal & Oxidation Resistance**: Tested for high-temperature stability with an oxidation viscosity increase of only 2.3% after 312 hours at 121°C, preventing sludge formation and varnish buildup.
- **Corrosion & Moisture Protection**: Formulated with active rust inhibitors that pass liquid-phase corrosion testing in synthetic seawater (Rust-free result) and offer excellent anti-emulsification properties to rapidly separate water from oil.

TECHNICAL SNAPSHOT

Parameter / Feature	Specification Limit	Test Result	European / EN ISO Standard
Model Number	GGRXHVGO-10	ISO VG 460 / CLP	ISO 12925-1 / DIN 51517-3
Appearance	Transparent	Transparent	Visual
Kinematic Viscosity (40°C)	414 to 506 mm^2/s	456.7 mm^2/s	EN ISO 3104
Kinematic Viscosity (100°C)	Report	30.47 mm^2/s	EN ISO 3104
Viscosity Index	Not less than 90	94	EN ISO 2909
Pour Point	No higher than -9°C	-18°C	EN ISO 3016
Flash Point (Open Cup)	No less than 200°C	236°C	EN ISO 2592
Timken OK Load	Not less than 60 lbs	60 lbs	DIN 51434
Four-Ball Sintering Load (PD)	Not less than 2450 N	2453 N	EN ISO 20623
Wear Scar Diameter (1800 rpm, 196 N, 60 min)	No more than 0.35 mm	0.29 mm	EN ISO 20623
Gear Failure Load Stage (FZG)	Greater than Stage 12	> Stage 12	EN ISO 14635-1
Synthetic Seawater Corrosion	Rust-free	Rust-free	EN ISO 7120 (Method B)
Water / Oil Demulsibility	Total separated water not less than 80 mL	80.7 mL	EN 26614 / ISO 6614
Shear Stability Viscosity (40°C)	414 to 506 mm^2/s	455.7 mm^2/s	EN ISO 20844

INSTALLATION & USE

Primary Applications: Heavy-duty industrial gearboxes, hoist speed reducers, spur/bevel/helical gear drives, and high-load traction mechanisms operating under severe outdoor or marine environments.

Low-Temperature Performance: Features a low pour point of -18°C (EN ISO 3016), ensuring smooth cold-start circulation and flow without cavitation during winter operations.

Foam Control: Tested under EN ISO 6247 to maintain rapid foam collapse (30/0 mL at 24°C), ensuring continuous lubrication film contact across gear teeth.

STANDARDS

See product page

The Groxx GGRXHVGO-10 Industrial Gear Oil is fully compliant with ISO 12925-1 (Type CKD) and DIN 51517-3 (CLP) standards to deliver unmatched equipment protection.

FULL DATA SHEET ↗

Product page ↗