



Research & Development

PRODUCT DATA SHEET

AXCL TechForce Industrial Gear Oil

AXCL TechForce Industrial Gear Oil is a premium, high-performance lubricant meticulously formulated to deliver exceptional protection and extended service life in harsh industrial environments. Featuring an advanced additive package with a complex sulfur-phosphorus system, AXCL TechForce offers outstanding extreme pressure (EP) performance, ideal for gearboxes and machinery subjected to heavy loads and shock loadings.

- **Enhanced Gear and Bearing Protection:** AXCL TechForce's advanced formulation effectively minimizes wear on gears and bearings, even under extreme loads and shock. This translates to extended equipment life, reduced maintenance costs, and improved overall productivity.
- **Superior Extreme Pressure Performance:** The complex sulfur-phosphorus additive system delivers exceptional EP characteristics, safeguarding gear teeth and bearings from scuffing, scoring, and micro pitting under high contact pressures.
- **Exceptional Oxidation and Thermal Stability:** AXCL TechForce resists thermal breakdown and oxidation at high operating temperatures, preventing oil thickening and sludge formation. This maintains optimal viscosity for continued protection and minimizes oil changes, reducing downtime and operational costs.
- **Excellent Rust and Corrosion Protection:** The robust additive package safeguards metal components from rust and corrosion, even in the presence of moisture contamination. This promotes longer equipment life and minimizes maintenance needs.
- **Broad Application Versatility:** AXCL TechForce offers a wide viscosity range to accommodate diverse industrial applications and operating conditions.
- **Outstanding Compatibility:** Formulated with select additives for compatibility with a wide range of seal materials, minimizing leakage and oil consumption.

Performance Level

AGMA 9005-F16, David Brown S1.53.101 E, DIN 51517 Part III, ISO 12925-1 (CKC), Key requirements of GB 5903 2011 (CKC), JIS K-2219:2006 (Class 2), AISE 224, Strong FAG FE-8 performance

Application

- Enclosed industrial gear drives
- Open gear drives (heavy grades)
- Spur, bevel, helical, worm, and industrial hypoid gear cases
- Industrial reduction gearboxes in mining equipment, cement mills, ball and rolling mills, crushers, conveyors, kilns, winches, machine tools, and marine equipment
- Chain drives, sprockets, slide guides, and flexible couplings
- Plain and rolling element bearings





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Specification & Parameter

S.No	Test	Method	Results					
			68	100	150	220	320	460
1.	ISO GRADE	-	68	100	150	220	320	460
2.	Appearance	Visual	B&C	B&C	B&C	B&C	B&C	B&C
3.	Kin. Viscosity @ 100 °C, cSt	ASTM D 445	8.73	11.36	14.89	19.2	24.4	30.5
4.	Kin. Viscosity @ 40°C, cSt	ASTM D 445	68.0	100.0	150.0	220.0	320.0	460.0
5.	Density @ 15°C, g/cc	ASTM D 1298	0.870	0.875	0.885	0.890	0.895	0.900
6.	Viscosity Index	ASTM D 2270	99	99	99	98	97	96
7.	Flash Point °C	ASTM D 92	>230	> 230	> 240	>250	>250	> 260
8.	Pour Point °C	ASTM D 97	-32	-29	-24	-21	-21	-21
9.	Foam Seq I, II, III, ml/ml	ASTM D 892	0/0	0/0	0/0	0/0	0/0	0/0
10.	Rust Test	ASTM D665	Pass	Pass	Pass	Pass	Pass	Pass
11.	Water Content	Crackles	Nil	Nil	Nil	Nil	Nil	Nil

*Technical data provided here is for reference only. Minor variations in product typical test data are to be expected.

Storage & Handling

The product should be stored indoors and stored in a clean and dry location. Keep it properly sealed to avoid contamination. Avoid the direct influence of sun and moisture, away from the ignition source. Recommended storage temperature -5°C to +45°C.

Health & Safety

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Material Safety Data Sheet (MSDS) which is available on request via your local sales office or by writing to info@axcllubes.com.

Oil contamination from other oils, greases, chemicals, dirty water, etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

Protect the environment

Take used oil or grease to an authorized collection point. Comply with local regulations. Do not discharge into drains, soil, or water.

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AXCL GULF, P O Box 41563, Phase 1, Hamriyah Free Zone, Sharjah, United Arab Emirates, Telephone: +971 6 526 3030, Fax: +971 6 526 3131.
www.axcllubes.com, info@axcllubes.com

