



GST[®] ADVANTAGE EP ISOCLEAN[®] Certified Lubricant 32, 46

PRODUCT DESCRIPTION

GST Advantage™ EP ISOCLEAN® Certified Lubricants are formulated with VARTECH™ Technology, which is advanced chemistry combined with premium base oils that inhibits varnish formation to help maintain peak performance, reliability and productivity. GST Advantage EP ISOCLEAN Certified Lubricants are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST Advantage EP ISOCLEAN Certified Lubricants are designed to meet the critical lubrication demands of:



- combined cycle turbines
- large heavy duty industrial gas turbines
- gas and steam turbines

They are an excellent recommendation for many other industrial applications including air compression and where R&O and EP type oils are recommended.

Chevron ISOCLEAN Certified Lubricants have been certified to meet specified ISO Cleanliness standards at point of delivery using industry leading filtration and testing technology. ISOCLEAN Certified products are the first step for contamination control and maximizing component life.

CUSTOMER BENEFITS

GST Advantage EP ISOCLEAN Certified Lubricants deliver value through:

- **Ready to use** — Enables users to meet stringent original equipment manufacturers' cleanliness standards for fill lubricants.
- **Flexibility** — ISO Cleanliness targets can be customized to fit your business application needs.

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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- **Peace of mind** — Each delivery of Chevron ISOCLEAN Certified Lubricant includes an ISOCLEAN Certificate of Analysis.
- **OE fluid cleanliness requirements** — Customized to meet specific equipment manufacturers' fluid cleanliness requirements.
- **Outstanding oxidation stability** for long service at elevated temperatures. Formulated with premium base oil technology and an ashless, zinc-free formulation.
- **Minimal sludge and varnish formation**
- **Rapid water separation** keeps water in oil to a minimum
- **Rust and corrosion protection**
- **High viscosity index** assures minimum viscosity change with temperature variations
- **Resistance to foam formation** helps prevent reservoir overflow
- **Quick air release** minimizes the possibility of pump cavitation in systems with high circulation rates and small reservoirs

FEATURES

GST Advantage EP ISOCLEAN Certified Lubricants are formulated with VARTECH Technology to resist and disrupt the formation of varnish. It uses premium base oil technology combined with an ashless, zinc-free formulation that provides exceptional oxidation stability, water separability, anti-wear and protection against rust and corrosion.

Higher temperatures in advanced gas and steam turbines require a circulating system oil with exceptional high temperature **thermal stability, oxidation resistance** and low sludging potential.



12 May 2021
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GST Advantage EP ISOCLEAN Certified Lubricants have **outstanding thermal and oxidation stability and excellent sludge control**.

Corrosion inhibition protects turbine shafts, gears and lubrication system parts from corrosion and rusting.

GST® Advantage EP ISOCLEAN® Certified Lubricants have excellent **water separability** characteristics which allow these oils to maintain a high film strength coating on critical wear points of bearings and gear reducers and to help ensure rapid removal of water contamination.

Foam inhibition helps to prevent sump overflow.

APPLICATIONS

GST Advantage EP ISOCLEAN Certified Lubricants are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST Advantage EP ISOCLEAN Certified Lubricants are designed to meet the critical lubrication demands of combined cycle turbines, large heavy duty industrial gas turbines, and gas and steam turbines with loaded gears. They are an excellent recommendation for many other industrial applications including air compression where R&O type oils are recommended.

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.

CLAIMS AND SPECIFICATIONS

ISO Grade	32	46
Ansaldo Energia TGO2-0171-E000	A	A
Doosan Skoda TP0010P	A	A
MAN Energy Solutions 10000494596	A	A
Siemens TLV 9013 04 and TLV 9013 05	A	A
Alstom NBA P50001A	M	M
Alstom NBA P50003A	M	
General Electric (Alstom) HTGD 90117	M	M
GE Oil & Gas ITN52220.02, ITN52220.03	M	M
General Electric GEK 28143a,b	M	M
General Electric GEK 101941A, 107395A, 120498, 27070, 32568e-k, 46506d,e	M	
MAG Cincinnati Cincinnati Machine P-38	M	
MAG Cincinnati Cincinnati Machine P-54		M
Siemens MAT 812101, 812106, 812108	M	
Siemens MAT 812102, 812107, 812109		M
Siemens Westinghouse PD-55125Z3	M	
Solar Turbine ES 9-224 Class II	M	M
ANSI/AGMA 9005-F16	M	M
ASTM D4304 Type I, II, III and D6158-HL	M	M
British Standard 489	M	M
DIN 51515-1 TD, 51515-2 TG	M	M
ISO 8068 AR, B, L-TSA, L-TGA, L-TSE, L-TGE	M	M
JIS K-2213 Type 2	M	M

A: Approved for

M: Meets or exceeds requirements

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.

Do not use in breathing air apparatus or medical equipment.

Consult with your Chevron Lubricant Representative or Chevron ISOCLEAN Certified Lubricants Marketer to set specific ISO Cleanliness targets for your business application.

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TYPICAL TEST DATA

ISO Grade	32	46
<i>Product Number</i>	293054	293055
<i>SDS Number</i>	54051	54051
AGMA Grade	—	1
API Gravity	33.0	31.8
Viscosity, Kinematic cSt at 40°C cSt at 100°C	34.2 5.8	42.4 6.6
Viscosity, Saybolt SUS at 100°F SUS at 210°F	176 45.7	218 48.2
Viscosity Index	112	105
Flash Point, °C(°F)	226(439)	234(453)
Pour Point, °C(°F)	-36(-33)	-34(-29)
Oxidation Stability ASTM D943 ^a ASTM D2272 ^b	> 10,000 2,200	> 10,000 2,100
FZG, Fail stage, DIN 51354	10	10

a Hours to 2.0 mg KOH/g acid number D943.

b Minutes to 25 psi pressure drop.

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

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