



GST[®] 2300 ISOCLEAN[®] Certified Lubricant 32, 46

PRODUCT DESCRIPTION

GST[®] 2300 ISOCLEAN[®] Certified Lubricants are formulated with premium base oil technology and are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST 2300 oils 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 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 2300 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.
- **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 2300 ISOCLEAN Certified Lubricants are formulated with premium base oil technology and an ashless, zinc-free formulation that provides exceptional oxidation stability, water separability, 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. GST 2300 ISOCLEAN Certified Lubricants have **outstanding thermal and oxidation stability and excellent sludge control**.



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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IO-83 ISOCLEAN

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

GST® 2300 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 2300 ISOCLEAN Certified Lubricants are highly recommended for use in gas and steam turbines with and without loaded gearboxes. GST 2300 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.

The following viscosity grades are formulated to meet the specified OEM requirements:

GST 2300 ISOCLEAN Certified Lubricant 32

- meets and exceeds
 - **ASTM** D4304-00, Type I and Type II (EP)
 - **British Standard** 489:1999
 - **DIN** 51515, L-TD and L-TG
 - **General Electric** GEK-32568J, GEK-32568K, GEK-101941A, GEK-28143A, GEK-28143B, GEK-46506D, GEK-27070
 - **MAG Cincinnati, Cincinnati Machine** P-38
 - **Siemens Westinghouse** M spec 55125Z3
 - **Solar** ES 9-224, Class II
- is approved by **Alstom** against HTGD 90117 for non-geared and geared gas and steam turbines
- is approved by **Ansaldo Energia** against TG02-0171-E00000/B
- is approved by **Siemens** against TLV 9013 04 for steam and gas turbosets with and without gearbox
- can obtain customer-specific approval from Toshiba (contact Lube Tek at 1-800-LUBE-TEK)

GST 2300 ISOCLEAN Certified Lubricant 46

meets and exceeds

- **ASTM** D4304-00, Type I and Type II (EP)
- **British Standard** 489:1999
- **DIN** 51515, L-TD and L-TG
- **MAG Cincinnati, Cincinnati Machine** P-55
- **Solar** ES 9-224, Class II
- is approved by **Alstom** against HTGD 90117 for non-geared and geared gas and steam turbines
- is approved by **Ansaldo Energia** against TG02-0171-E00000/B
- is approved by **Siemens** against TLV 9013 04 for steam and gas turbosets with and without gearbox
- replaces GST Oil EP 46

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.

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.

TYPICAL TEST DATA

ISO Grade	32	46
<i>Product Number</i>	278070	278071
<i>SDS Number</i>	12798	12798
AGMA Grade	—	1
API Gravity	32.7	32.0
Viscosity, Kinematic cSt at 40°C cSt at 100°C	30.4 5.2	43.7 6.6
Viscosity, Saybolt SUS at 100°F SUS at 210°F	157 43.8	225 48.2
Viscosity Index	102	101
Flash Point, °C(°F)	222(432)	224(435)
Pour Point, °C(°F)	-33(-27)	-33(-27)
Oxidation Stability ASTM D943 ^a ASTM D2272 ^b	> 10,000 2,300	> 10,000 2,300
FZG, Fail stage, DIN 51354	12	12

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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