

GST Advantage™ EP with VARTECH™ Technology



Industrial Gas and Steam Turbine Oil



Product description

VARTECH™ Technology:

GST Advantage™ EP is formulated with VARTECH™ Technology which is advanced chemistry that helps:

- Improve oxidation stability
- Reduce oil degradation
- Extend oil life by limiting harmful precursors that can lead to varnish formation

VARTECH™ Technology inhibits varnish formation to help maintain peak performance, reliability and productivity.

Customer benefits and product features

Customer benefits

- **Exceptional Oxidation and Thermal Stability** assists with long service life at severe temperatures with **Minimal Deposit Formation**
- **Low Varnish Potential** helps minimize varnish formation in order to protect the equipment
- **Enhance gear protection** with anti-wear additives system to help protect loaded gear tooth
- **Outstanding Rust and Corrosion Protection**
- **High Viscosity Index** helps ensure minimum viscosity change when variations in temperature occur
- **Minimal Foaming** helps prevent sump overflow or erratic governor operation
- **Fast Air Release** helps minimize possibility of pump cavitation in systems with high circulation rates and lesser resonance time
- **Rapid Water Separation** facilitates water removal
- **Air Compressor Lubricant** for systems requiring an ISO 32/46 viscosity, R&O oil and anti-wear performance

Product features

- **GST Advantage™ EP** turbine oil has exceptional thermal and oxidative stability. It is suitable for use in geared and non-geared gas and steam turbines where extreme temperatures are experienced and require circulation systems with exceptional high temperature stability
- **GST Advantage™ EP** turbine oil combines highly refined group II base stocks and an advanced additive package to help minimize the formation of deposits in reservoirs, high temperature bearings and other hot areas of the turbine

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Applications

- Geared and non-geared gas, steam and hydroelectric turbines
- Rotating machinery in gas and steam combined-cycle cogeneration units
- Air compressors, turbo-blowers and centrifugal pumps requiring a rust and oxidation inhibited oil
- Marine reduction gears where R&O oils are specified
- Industrial applications requiring R&O type circulating oils with extended service capability

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.

Product approvals, performance and recommendations

GST Advantage™ EP pending for approval of the following specifications:

- Ansaldo Energia G-HTCT 689029
- Ansaldo Energia TG02-0171-E00000/C, AE94.3 A & AE94.2: ISO 32, 46
- MAN Energy Solutions 10000494596 rev. 2 – Approved ISO 32, 46
- Siemens TLV 9013 04 and TLV 9013 05 for turbosets with and without gearboxes – Approved ISO 32, 46

GST Advantage™ EP has been developed by Chevron to meet requirements of the following specifications:

- Doosan Skoda TP0010P (ISO 32, 46)
- Fiat AVIO TS 5001 (ISO 32)
- General Electric: GEK 32568k (ISO 32), GEK 28143b (ISO 32,46,68), GEK 46506e (ISO 32), GEK27070 (ISO 32), GEK 107395A (ISO 32), GEK 101941A (ISO 32)
- GE Oil and Gas ITN 52220.02 (ISO 32, 46,68,100), ITN 52220.03 (ISO 32,46)
- GE HTGD 90117 V0001 AC
- GEC Alstom NBA P5001A (ISO 32,46), P50003A (ISO 32,46)
- Siemens MAT 812101, 812106, 812108 (ISO 32); MAT 81202, 81209 (ISO 46)
- Siemens Westinghouse M Spec 55125Z3 (ISO 32)
- Solar Turbine ES9-224 Class II (ISO 32, 46)
- Toshiba LST-GMH-XUTW2-0005 (ISO 32)
- ANSI/ AGMA 9005-E02-R&O / EP
- ASTM D4304-Type I,II and III, ASTM D 6158-HL
- British Standard BS 489:1999
- DIN 51515-1, DIN 51515-2 and DIN51524/1 HL
- GB 1120-2011 L-TSA (Type A & B) & L-TGA, L-TGE, L-TSE (Type A)
- ISO 8068-L-TSA & L-TGA; L-TGE & L-TSE; AR, B
- ISO 11158-HM
- JIS K-2213 Type II

Consult OEM representatives for independent verification, updates and recommendations.

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Typical test data

GST ADVANTAGE™ EP KEY PROPERTIES	TEST METHODS	RESULTS			
ISO Grade		32	46	68	100
Product Code		520034	520039	520095	520096
Air Release @ 50°C, mins	D3427	1.0	2.0	3.0	4.0
Flash Point, COC, °C	D92	226	234	248	262
TOST life, hrs to 2.0 Acid Num	D943	10,000	10,000	10,000	10,000
RPVOT, Mins	D2272	2200	2100	1800	1700
Pour Point, °C	D97	-36	-34	-32	-32
Kin. Viscosity, mm ² /s @ 40°C	D445	34.2	42.4	68	100
mm ² /s @ 100°C	D445	5.813	6.55	8.9	11.6
Viscosity Index	D2270	112	105	104	104
FZG, Fail Load Stage	D5182	10	10	10	10

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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.

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended. Produced by Chevron Global Lubricants: Asia Pacific

ENVIRONMENT, HEALTH and SAFETY. Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit the [Product Information Center](#).

This Product Data Sheet (PDS) was produced for the Asia Pacific region based on the best available information at the time of issue. The specific information included may not directly reflect the market or conditions, and may vary. For the most up-to-date, country-specific information, please contact your local customer service center.