GST Oil

Industrial Turbine Oil

Product Data Sheet

GST Oils are formulated with premium base oil technology designed to meet the critical demands of non-geared gas, steam, and hydroelectric turbine bearing lubrication and reduction gear lubrication in marine operations. They are an excellent recommendation for many other industrial applications including air compression where R&O type oils are recommended.

APPLICATIONS

- Non-geared gas, steam, and hydroelectric turbine bearing lubrication.
- Reduction gear lubrication in marine operations
- Many other industrial applications including air compression where R&O type oils are recommended
- Do not use in breathing air apparatus or medical equipment.

BENEFITS

- **Non-volatile oxidation inhibition**
  Non-volatile oxidation inhibition minimizes the evaporative loss of the inhibitors, a common problem with turbine oils where bearing temperatures are high and system capacities are limited. With retained oxidation resistance for long periods under high temperature conditions, GST Oils will promote long oil service life and help minimize turbine down time.

- **Thermal and oxidation stability**
  Higher temperatures in advanced gas and steam turbines require circulating system oil with exceptional high temperature stability. GST Oils have outstanding thermal and oxidation stability.

- **Corrosion inhibition**
  Corrosion inhibition protects costly turbine shafts and gears from corrosion and rusting.

- **Demulsibility**
  GST Oils have excellent demulsibility characteristics which allow these oils to maintain a high film strength coating on critical wear points of bearings and gear reducers and assure fast removal of water contamination.

- **Foam inhibition**
  Foam inhibition helps prevent sump overflow and erratic governor operation.

PERFORMANCE STANDARDS

		ISO 32	ISO 46
Alstom Power	HTGD 90117 (non-geared turbines)	Approved	Approved
ASTM	D4304-Type 1*	Performance	Performance
British Standards Institution	BS 489*	Performance	Performance
MAG Cincinnati, Cincinnati Machine	P-38	Performance	-
	P-55	-	Performance
German Standard	DIN 51515/1*	Performance	Performance
	DIN 51515/2	Performance	-
General Electric	GEK 27070	Performance	-
	GEK 28143B	Performance	Performance
	GEK 32568F	Performance	-
	GEK 46506D	Performance	-
Siemens	TLV 9013 04	Approved	Approved
	TLV 9013 05	Approved	Approved
	MAT 812101	Performance	-
	MAT 812102	-	Performance
Siemens Westinghouse	M spec 55125Z3	Performance	-
Solar Turbines	ES 9-224 Class II	Performance	Performance

* Standard organization requirements for new lubricants used in gas and steam turbines and auxiliary equipment

TYPICAL CHARACTERISTICS

Product Code	3156	3157
ISO Viscosity Grade	32	46
Density at 15°C, kg/L	0.862	0.868
Flash Point, COC, °C	222	224
Oxidation Stability D943 modified, hr to Acid No. 2.0 mg KOH/g	17,000	12,000
Oxidation Stability D2272, mins to 25 psi pressure drop	1,700	1,400
Pour Point, °C	-36	-36
Viscosity, at 40°C, mm^2/s at 100°C, mm^2/s	30 5.2	44 6.6
Viscosity Index	102	101

PACK SIZES

205L

SERVICE CONSIDERATIONS

GST Oils ISO 32 and 46 are registered by the United States NSF. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements of appropriate use, ingredient review and labeling verification. 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.

ENVIRONMENT, HEALTH AND SAFETY

Users should consult the MSDS, follow the precautions outlined and comply with all laws and regulations concerning its use and disposal. Used packaging material should not be incinerated or exposed to flame. After use, protect your environment. Do not pollute drains, soil or water with used product.

OTHER INFORMATION

For further information on Caltex products and services call the Lubelink Advisory Service on 1300 364 169 between 8.00 am and 6.00 pm (EST) Monday to Friday.

All reasonable care has been taken to ensure that the information contained in this publication is accurate at the time of printing. However, the information is liable to variation in the event of subsequent changes in the blend, formulation, method of storage, improper handling and usage etc.