



Regal[®] SGT 22

Premium performance synthetic gas turbine lubricant

Product description

Regal SGT 22 is a premium performance synthetic gas turbine lubricant designed for aero-derivative gas turbines in non-aviation stationary applications, including power generation and marine operations.

Regal SGT 22 is a synthetic polyol ester based fluid, formulated with a premium performance additive system designed to resist oil breakdown under severe, high temperature, high load conditions.

Customer benefits

- Synthetic polyol ester base fluid formulation designed to resist breakdown under severe, high temperature, high load conditions
- Low volatility synthetic technology helps minimise evaporative losses, offering reduced maintenance and increased uptime
- Formulated to reduce coking and minimise deposit formation on bearings and other areas exposed to hot gases
- High load carrying capacity promotes protection against component wear
- Wide temperature performance offers good fluidity at low temperatures and protection during severe high temperature operation
- Designed to deliver dependable premium wear protection to critical components across a wide temperature range

Product highlights

- **Designed to resist breakdown under high temperature, high load conditions**
- **Low volatility synthetic technology**
- **Formulated to reduce coking and deposit formation**
- **High load carrying capacity**
- **Wide temperature performance**
- **Offers premium wear protection**

Selected specification standards include:

Airsearch	Avco-Lycoming
Centrax	GE
GE Energy	Microturbo
O-156 – DEF STAN 91-101 Iss. 3, Amd. 1, OX-27/OX-28	Rolls Royce (Allison)
Rolls-Royce	Rolls-Royce Avon
Rolls-Royce Olympus, Tyne, Spey for industrial and Marine	SAE
Solar	Sundstrand
Turbomeca	U.S. Military
United Technologies	

Applications

- Suitable for use in aero-derivative gas turbines exposed to severe operating environments in non-aviation applications such as industrial power generation, gas transmission and marine propulsion
- Not to be used in aircraft service

Note: Solar Turbines Specification ES 9-224 calls for MIL-PRF-23699 C/I material

Approvals, performance and recommendations

Approvals

- U.S. Military Specification MIL-PRF-23699G STD –DCSEA 299/A
- SAE AS5780 Class SPC
- O-156 – DEF STAN 91-101 Iss. 3, Amd. 1, OX-27/OX-28
- Rolls-Royce RB 211 Approval
- Rolls-Royce Avon (SB No. 0122)*
- Rolls-Royce Olympus, Tyne, Spey for industrial and Marine applications
- Rolls Royce (Allison) for use in 501-K models
- GE CF34-3 to GE CF34-10 LM ground gas Turbines (all models)
- GE (D50 TF-1) LM 500, 1600, 2500, 5000 and 6000 models
- GE Energy MIL-L-23699 Classification STD (Standard - Non-Corrosion Inhibiting)
- Approved by Centrax for use on their 501-K genset units

* This service Bulletin is applicable to all industrial Avon gas generators and replaces Service bulletin N°s. 85, 113 and 11.

Performance

- Meets Solar ES9-224 (Class IV) specification
- Airsearch, Avco-Lycoming, Centrax, Microturbo, Power Systems Division of United Technologies, Sundstrand and Turbomeca models for non-aviation use.

Product maintenance and handling

Not to be used in aircraft service.

Synthetic polyol ester lubricants slowly hydrolyse in the presence of water. High temperatures accelerate this process. Accordingly, Regal SGT 22 should be stored indoors.

Regal SGT 22 is compatible and miscible with all other MIL-PRF-23699G STD approved oils. For this reason, changeover to Regal SGT 22 can be achieved by topping off. However, by virtue of differences in seal swell characteristics between oils, the engine / accessory manufacturers' approval should be obtained for any proposed oil change. Mixing of different viscosity grades is not recommended.

Regal SGT 22 is not compatible with mineral oils and should not be mixed with phosphate ester hydraulic fluids since such mixtures can adversely affect seal compatibility and coking propensity.

Regal SGT 22 is compatible with all metals normally used in aero-derivative gas turbines and accessory equipment. The following seal materials are compatible with Regal SGT 22: Viton, Nitrile and silicone rubbers, PTFE and nylon.

The following paint finishes have been found to be suitable:

- Up to 220°C: polyurethane and phenolic resin
- Above 220°C: Silicon / epoxy / aluminium

Typical test data		
Test	Test Methods	Results
Viscosity Grade		22
Shelf Life: 60 months from date of filling indicated on the product label		
Kinematic viscosity at -40°C, mm ² /s	ASTM D 445	9171
Kinematic viscosity at 40°C, mm ² /s	ASTM D 445	25.01
Kinematic viscosity at 100°C, mm ² /s	ASTM D 445	5.03
Low temperature stability 72h@-40°C,%	FED-STD-791-3458	1.17
Density at 20°C, kg/l	ASTM D4052	0.993
Flash Point, °C	ASTM D92	269
Pour Point, °C	ASTM D5950	-57
Acid Number, mgKOH/g	SAE-ARP5088	0.18

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see www.texacolubricants.com.

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