

SENT-8188

Corrosion Preventive Oil,
Gas Turbine Engine, Aircraft Synthetic Base

Military Specification: MIL-PRF-8188D

QPL Number: QPL 6A

DESCRIPTION:

SENT-8188 is a light amber coloured inhibited synthetic ester based gas turbine lubricating and preservative oil. **SENT-8188** is formulated for limited use in aircraft gas turbine engine designed to operate on MIL-PRF-7808 or MIL-PRF-23699 type oils and provides long-term storage and corrosion prevention.

APPLICATION:

SENT-8188 is intended for preservation of turboprop and turbojet engines. This corrosion preventative oil is capable of limited use, not to exceed 25 hours, as an aircraft engine lubricant, and can be used for both preservation and final acceptance runs of aircraft engines requiring MIL-PRF-7808, MIL-PRF-23699 and SAE AS5780. type oils.

Temperature Range

The recommended operating temperature range for MIL-PRF-7808 and MIL-PRF-23699 type oils are from -54°C to 200°C (-65 °F to 392°F).

Limitations

SENT-8188 is a synthetic ester based fluid. It may adversely affect certain paints and elastomers. Serious deterioration of rubber parts, coatings, paint and other organic materials may result from use of this product in system designed for use with petroleum based fluids. Customers should determine the compatibility of existing components and make any changes as required to accompany use of this fluid.



SENT-8188

SPECIFICATIONS

	Test Method	Result
API Gravity @ 15.6°C	ASTM D-287	16.1
Specific Gravity @ 60/60°F (16/16°C)	Table 3	0.965
Pounds per Gallon @ 60°F (16°C)	Table 8	8.03
Flash Point, COC, °F (°C), min. 410(210)	ASTM D-92	440 (226)
Pour Point, °F (°C) max. -75(-60)	ASTM-D-97.	-80 (-63)
Kinematic Viscosity, cSt @ 212°F(100°C) min. 3.25	ASTM-D-445	3.32
Kinematic Viscosity, cSt @ 104°F (40°C) min. 11.5	ASTM D-445	13.50
Kinematic Viscosity, cSt -60°F (-51°C) after 35 minutes max 17,000	ASTM D-445	9,200
Total Acid Number, mg KOH/g max. 0.5	ASTM D-664	0.11
Rubber Swell, "H" Type, %, (between 12 to 35)	FTM-3604	28.6
Evaporation Loss, % wt, 6 hours @ 401°F (205°C) max. 30	ASTM D-972	21.7
Lead Corrosion, g/m ² max. 40	FTM 5321	1.2
Corrosion – Oxidation Stability, 48 hours @ 200oC (392°F)	D-4636	
Wt Change, mg/cm ²		
Silver (+-0.2)		-0.02
Aluminum (+-0.2)		0.00
Magnesium (+-0.4)		0.00
Steel (+-0.2)		0.00
Bronze (+-0.4)		-0.04
Titanium (+-0.2)		-0.05
Viscosity Change @ 104°F (40°C) (-5 to +25)		10
Total Acid Number Change, mg KOH/g (max. 4.0)		0.5
Corrosion Test @ 232°C (450°F)	FTM 5305	
Silver, wt change, g/m ² (+-4.5 max.)		0.0
Bronze, wt change, g/m ² (+-4.5 max.)		-0.1
Foaming, Static	FTM 3213	
Volume, ml, (100 max.)		Pass
Collapse Time, seconds (60 max.)		Pass
Protection, Humidity Cabinet	D-1748	Pass

SENT-8188 meets all the requirements of, and is qualified to **MIL-PRF-8188**. This fluid is identified by NATO code: C-638.

PACKAGING:

Product is packaged in 55-gallon drums and 5-gallon pails.

