

Shell EcoSafe Turbine Fluid S5 X 25

Low-varnishing, top-tier gas and combined-cycle turbine fluid

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DESCRIPTION

Shell EcoSafe Turbine Fluid S5 X 25, formerly EcoSafe TF-25, is a next-generation, synthetic turbine fluid developed to meet the lubrication requirements of turbocompressors, heavy-duty gas turbines and combined-cycle systems. It has been designed to minimize deposit and sludge formation and to offer outstanding long-term performance under the most severe operating conditions.

Shell EcoSafe Turbine Fluid S5 X 25 delivers exceptional protection against fluid breakdown, even under conditions of high oxidation and thermal stress, thereby extending service life and reducing maintenance costs.¹ It has excellent resistance to varnish and sludge formation, which enables turbine systems to operate reliably, even during severe operating conditions such as peak-load operations, thus preventing unplanned turbine outages resulting from valve sticking.

Shell EcoSafe Turbine Fluid S5 X 25 can also reduce the potential for microdieseling, electrostatic buildup and other conditions that can contribute to varnish formation and fluid breakdown. The fluid is formulated with an antifoam additive that, coupled with good air-release, reduces the risk of pump cavitation, excessive wear and premature fluid oxidation.

Shell EcoSafe Turbine Fluid S5 X 25 meets and exceeds the specifications for General Electric GEK 32568k. It is compatible with commonly used seals, hoses and metals and common gas turbine seals, and is completely miscible with Shell Turbo T and Shell Turbo S4 products.



SPECIFICATIONS, APPROVALS AND RECOMMENDATIONS

Shell EcoSafe Turbine Fluid S5 X 25 meets and exceeds the specifications for General Electric GEK 32568k. For a full listing of equipment approvals and recommendations, please consult your local Shell Lubricant Solutions technical help desk.

¹Compared with mineral-based turbine products



TYPICAL PHYSICAL CHARACTERISTICS

PROPERTIES		
	Method	Shell EcoSafe Turbine Fluid S5 X 25
Density at 15°C, g/cm ³	ASTM D4052	0.981
Kinematic viscosity at 40°C, mm ² /s	ASTM D445	24.0
Kinematic viscosity at 100°C, mm ² /s	ASTM D445	4.9
Viscosity index	ASTM D2270	131
Flash point (Cleveland open cup), °C	ASTM D92	>240
Total acid number, mg KOH/g	ASTM D664	<0.2
Pour point, °C	ASTM D97	<-48
Air release, min	ASTM D3427	<2
Electrical conductivity at 24°C, pS/m	ASTM D2624	>2,000
Copper strip corrosion, 3 h at 100°C	ASTM D130	1a
Rust control at 4 and 24 h, rating: SSW	ASTM D665B	Pass, no rust
These characteristics are typical of current production. Although future production will conform to Shell's specifications, variations in these characteristics may occur.		

CONTACT US

For more information, please contact your Shell Lubricant Solutions representative or visit shell.us/ecosafe.

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