Technical Data Sheet
Revision Date: 21.11.2018

PETRONAS JENTERAM SYN AE

Premium Performance Gas Turbine Engine Oil

PETRONAS Jenteram SYN AE is a premium performance gas turbine engine oil specially developed for use in military and civil aircrafts gas turbine engines and in stationary industrial applications. Formulated with polyol esters base oils enhanced with advanced anti-wear, anti-oxidant, anti-corrosion additives, PETRONAS Jenteram SYN AE oil provides excellent thermal and oxidation stability, with no coke or deposit formation in the hot parts of the gas turbine such as the high-pressure turbine bearing, scavenge or vent lines.

PETRONAS Jenteram SYN AE meets or exceeds key OEM requirements.

Applications

PETRONAS Jenteram SYN AE is recommended for use in:

- Military and civil aircrafts gas turbine engines and in stationary industrial applications
- Industrial gas turbines:
  - Rolls Royce/Allison - Avon, RB211, Allison 501K, Olympus, Tyne, Spey)
  - General Electric – all models (LM2500, LM6000, LMS 100)

Features and Benefits

Features	Benefits
Excellent anti-wear protection	Protects equipment components from excessive wear and provides longer equipment life
Excellent thermal and oxidation stability	Maintains performance levels under high temperatures and pressure, enabling long oil drain intervals
Excellent rust & corrosion protection	Inhibits the corrosion process that occurs in presence of water, improving equipment life
Excellent foam stability	Protects the system from air degenerative effects reducing maintenance costs
Excellent non-coking performance	Low tendency of sludge formation
Low volatility	Lower volatility at high temperature

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Typical Properties

Characteristic	Method	Specification	25
Specific Gravity @15°C	ASTM D 4052	Report	0,996
Kinematic Viscosity at 40°C, cSt	ASTM D 445	Min. 23,0	25,6
Kinematic Viscosity at 100°C, cSt	ASTM D 445	4,90 – 5,40	5,12
Kinematic Viscosity at -40°C, cSt	ASTM D 445	Max. 13.000	9468
Viscosity Index	ASTM D 2270	Report	132
Viscosity Stability, 72h at -40°C, % change	FTM-S-791-3458	±6	-0,7
Particles contamination according to NAS 1638	HIAC	Max. 6	4
Flash Point, °C	ASTM D 92	Min. 246	270
Pour Point, °C	ASTM D 97	Max. -54	-57
Acid Number, mgKOH/g	SAE-ARP-5088	Max. 1,00	0,16
Evaporation Loss, 6h 30 at 204°C, %w	ASTM D 972	Max. 10,0	3,4
Sludge content through 10 micrometers, mg/100 cm^3	-	Max. 50	0,1
Thermal Stability and corrosivity, 96h at 274°C	FTM-S-791-3411		
Viscosity change at 40°C, %		±5,00	-0,3
Acid Number Change (pH=11), mgKOH/g		Max. 6,00	0,80
Steel Weight Change, mg/cm^2		±4,00	-0,05
Thermal Stability and corrosivity, 72h at 204°C	FTM-S-791-5308		
Viscosity change at 40°C, %		-5,0 - +25,0	+17,0
Acid Number Change (pH=11), mgKOH/g		Max. 3,00	1,20
Steel Weight Change, mg/cm^2		±0,2	0,0
Silver Weight Change, mg/cm^2		±0,2	0,0
Aluminium Weight Change, mg/cm^2		±0,2	0,0
Magnesium Weight Change, mg/cm^2		±0,2	0,0
Copper Weight Change, mg/cm^2		±0,4	0,0
Foam Sequence I, mL	ASTM D 892	Max. 25/0	10/0
Foam Sequence II, mL		Max. 25/0	5/0
Foam Sequence III, mL		Max. 25/0	10/0
Sediments, filtered through 1,2 micrometer porosities, mg/dm^3	FTM-S-791-3010	Max. 10,0	0,1

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Characteristic	Method	Specification	25
Metal content, mg/kg			
Zinc		Max. 2	0
Silicon		Max. 10	2
Tin		Max. 11	0
Titanium		Max. 2	0
Nickel		Max. 2	0
Lead	ICP	Max. 2	0
Iron		Max. 2	0
Magnesium		Max. 2	0
Aluminium		Max. 2	0
Copper		Max. 1	0
Silver		Max. 1	0
Chromium		Max. 2	0
Molybdenum		Max. 3	0

All technical data is provided for reference only and all specification based on MIL-PRF-23699 F Class STD / SS is available upon request including quality control limits

Performance Levels

- MIL-PRF-23699 F Class STD

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Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refers to product SDS or contact us at: www.pli-petronas.com

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