

**SPECIFICATIONS FOR GAS OIL (0.05% MAX SULPHUR)**
**ANNEX -2**

PROPERTY/TEST	TEST METHOD	SPECIFICATIONS
APPEARANCE		CLEAR, BRIGHT AND FREE FROM WATER & VISIBLE IMPURITIES
DENSITY AT 15 °C kg/m <sup>3</sup>	ASTM D 1298 / ASTM D 4052	820 - 860
COLOUR	ASTM D 1500	MAX. 1.5
DISTILLATION	ASTM D 86	
IBP °C		REPORT
T10 °C		REPORT
T50 °C		REPORT
T85 °C		MAX. 350
T95 °C		MAX. 370
CETANE INDEX OR	ASTM D 976 / ASTM D 4737	MIN. 46 (NOTE 1)
CETANE NUMBER	ASTM D 613	MIN. 49
CLOUD POINT °C	ASTM D 2500/ASTM D 5771/ASTM D 5773	MAX. 15
CFPP °C	ASTM D 6371	MAX. 5
SULPHUR CONTENT mg/kg	ASTM D 4294 / ASTM D 2622	MAX. 500
FLASH POINT °C	ASTM D 93	MIN. 60
VISCOSITY KIN AT 40 °C, cSt	ASTM D 445	2 - 4.5
WATER CONTENT (mg/kg)	ASTM D 6304	MAX. 200
CU - STRIP CORROSION 3 hrs AT 50 °C	ASTM D 130	MAX. 1
ASH % m/m	ASTM D 482	MAX. 0.01
CARBON RESIDUE, % m/m	ASTM D 524 / ASTM D 4530	MAX. 0.3
PARTICULATE CONTAMINANTS, TOTAL mg/L	ASTM D 6217	MAX. 10
STRONG ACID NO. mg KOH/g	ASTM D 664/974	NIL
TOTAL ACID NO. mg KOH/g	ASTM D 664/ D 974	MAX. 0.2
CALORIFIC VALUE GROSS kcal/kg	ASTM D 240	MIN. 10500
OXIDATION STABILITY g/m <sup>3</sup>	ASTM D 2274	MAX. 25
DSEP RATING	ASTM D 7261	50 – 100
FAME	ASTM D 7371	NON DETECTABLE (NOTE 2)
LUBRICITY (HFRR wear scar dia.@60°C) micron	ASTM D 6079	MAX. 460

**IMPORTANT:**

NOTE 1 : NOT APPLICABLE IF ANY CETANE IMPROVER ADDITIVE IS PRESENT

NOTE 2 : ADDITION OF BIO DIESEL OR BIODIESEL BLENDS ARE NOT PERMITTED

## SPECIFICATIONS FOR GAS OIL (0.001% MAX SULPHUR)

PROPERTY/TEST	TEST METHOD	SPECIFICATIONS
APPEARANCE		CLEAR, BRIGHT AND FREE FROM WATER & VISIBLE IMPURITIES
DENSITY AT 15 °C kg/m <sup>3</sup>	ASTM D 1298 / ASTM D 4052	820 - 845
COLOUR	ASTM D 1500	MAX. 1.5
DISTILLATION	ASTM D 86	
E250 Vol %		MAX.65
E350 Vol %		MIN. 85
T95 °C		MAX. 360
CETANE INDEX OR	ASTM D 976 / ASTM D 4737	MIN. 50 (NOTE 1)
CETANE NUMBER	ASTM D 613	MIN. 51
CFPP °C	ASTM D 6371	MAX. +5
SULPHUR CONTENT mg/kg	ASTM D 5453 ASTM D 2622	MAX. 10
FLASH POINT °C	ASTM D 93	MIN. 55
VISCOSITY KIN AT 40 °C, cSt	ASTM D 445	2 – 4.5
WATER CONTENT mg/kg	ASTM D 6304	MAX. 200
CU - STRIP CORROSION 3 hrs AT 50 °C	ASTM D 130	MAX. 1
ASH % m/m	ASTM D 482	MAX. 0.01
CARBON RESIDUE, % m/m	ASTM D 524 / ASTM D 4530	MAX. 0.2
PARTICULATE CONTAMINANTS, TOTAL mg/l	ASTM D 6217	MAX. 10
STRONG ACID NO. mg KOH/g	ASTM D 664/974	NIL
TOTAL ACID NO. mg KOH/g	ASTM D 664/974	MAX. 0.2
CALORIFIC VALUE GROSS kcal/kg	ASTM D 240	MIN. 10600
OXIDATION STABILITY g/m <sup>3</sup>	ASTM D 2274	MAX. 25
DSEP RATING	ASTM D 7261	50 – 100
FAME	ASTM D 7371	NON DETECTABLE (NOTE 2)
LUBRICITY (HFRR wear scar dia.@60°C) micron	ASTM D 6079	MAX. 460
POLYCYCLIC AROMATIC HYDROCARBONS % m/m	ASTM D 6591	MAX. 11

### IMPORTANT:

NOTE 1 : NOT APPLICABLE IF ANY CETANE IMPROVER ADDITIVE IS PRESENT.

NOTE 2 : ADDITION OF BIO DIESEL OR BIODIESEL BLENDS ARE NOT PERMITTED.

## SPECIFICATIONS FOR GASOLINE (92 UNL)

PROPERTY/TEST	TEST METHOD	SPECIFICATIONS
APPEARANCE		BRIGHT, CLEAR AND FREE FROM WATER, VISIBLE IMPURITIES & DYES ( NOTE 1)
DENSITY @ 15 °C kg/m <sup>3</sup>	ASTM D 1298 / ASTM D 4052	720 – 785
REID VAPOUR PRESSURE @ 37.8 °C kPa	ASTM D 323	45 – 60
RESEARCH OCTANE NUMBER (RON)	ASTM D 2699	MIN. 92
MOTOR OCTANE NUMBER (MON)	ASTM D 2700	MIN. 82
DISTILLATION	ASTM D 86	
IBP °C		REPORT
T 10 °C		45 – 70
T 50 °C		80 – 125
T 90 °C		MAX. 180
FBP °C		MAX. 210
RESIDUE, vol. %		MAX. 2.0
E150 vol. %		MIN 70
DOCTOR TEST OR MERCAPTAN SULPHUR, mg/kg	IP 30 /ASTM D 4952 ASTM D 3227/IP 342	SWEET OR MAX 15ppm RSH
SULPHUR CONTENT mg/kg	ASTM D 4294 / ASTM D 5453 / ASTM D 2622	MAX. 150
LEAD CONTENT g/l	ASTM D 5059 / ASTM D 3237	MAX. 0.013 (NOTE 2)
UNWASHED GUMS mg/100 ml	ASTM D 381	MAX. 30
WASHED GUMS mg/100 ml	ASTM D 381	MAX. 5
OXYGENATE % v/v	ASTM D 4815	MAX. 15
OXYGEN CONTENT % m/m	ASTM D 4815	MAX. 2.7
OXIDATION STABILITY, Minutes	ASTM D 525	MIN. 480
COPPER CORROSION 3 h @ 50 °C	ASTM D 130	MAX. 1
BENZENE % v/v	ASTM D 3606 / ASTM D 5580	MAX. 2.5
TOTAL AROMATICS % v/v	ASTM D 5580	MAX 40
OLEFINES CONTENT (%v/v)	ASTM D 1319/ASTM D 6730	MAX. 18

NOTE 1 : SPECIFY TAGGING COMPONENTS, IF ANY

NOTE 2 : NO INTENTIONAL ADDITION OF LEAD COMPOUNDS.

IMPORTANT:

- THERE SHALL BE NO INTENTIONAL ADDITION OF METAL COMPOUNDS CONTAINING FERROUS, MANGANESE & PHOSPHOROUS.
- ADDITION OF ALCOHOLS ARE NOT PERMITTED.

### SPECIFICATIONS FOR GASOLINE (95 UNL)

PROPERTY/TEST	TEST METHOD	SPECIFICATIONS
APPEARANCE		BRIGHT ,CLEAR AND FREE FROM WATER, VISIBLE IMPURITIES & DYES (NOTE 1)
DENSITY @ 15 °C kg/m <sup>3</sup>	ASTM D 1298 / ASTM D 4052	720 – 775
REID VAPOUR PRESSURE @ 37.8 °C kPa	ASTMD 323	45-60
RESEARCH OCTANE NUMBER (RON)	ASTM D 2699	MIN. 95
MOTOR OCTANE NUMBER (MON)	ASTM D 2700	MIN. 85
DISTILLATION	ASTM D 86	
IBP °C		REPORT
E100, Vol %		46-71
E150, Vol %		MIN. 75
FBP °C ,		MAX. 210
RESIDUE vol. %		MAX. 2.0
DOCTOR TEST OR MERCAPTAN SULPHUR, mg/kg	IP 30 / ASTM D 4952 / ASTM D 3227/IP 342	SWEET OR MAX. 15 ppm RSH
SULPHUR CONTENT mg/kg	ASTM D 2622 / ASTM D 5453	MAX. 50
LEAD CONTENT g/l	ASTM D 5059 / ASTM D 3237	MAX. 0.005 (NOTE 2)
TOTAL AROMATICS % v/v	ASTM D 5580	MAX 35
WASHED GUMS mg/100 ml	ASTM D 381	MAX. 5
OXYGENATE % v/v	ASTM D 4815	MAX. 15
OXYGEN CONTENT % m/m	ASTM D 4815	MAX 2.7
OXIDATION STABILITY, Minutes	ASTM D 525	MIN. 360
COPPER CORROSION 3 hrs @ 50 °C	ASTM D 130	MAX. 1
BENZENE % v/v	ASTM D 3606 / ASTM D 5580	MAX. 1
OLEFINS CONTENT % v/v	ASTM D 1319 / ASTM D 6730	MAX. 18

NOTE 1 : SPECIFY TAGGING COMPONENTS, IF ANY

NOTE 2 : NO INTENTIONAL ADDITION OF LEAD COMPOUNDS.

#### IMPORTANT:

- THERE SHALL BE NO INTENTIONAL ADDITION OF METAL COMPOUNDS CONTAINING FERROUS, MANGANESE & PHOSPHOROUS.
- ADDITION OF ALCOHOLS ARE NOT PERMITTED

## **SPECIFICATION OF JET A-1**

### **PROPERTY/TEST**

JET A-1 SHOULD CONFORM TO LATEST AFQRJOS CHECKLIST (CURRENTLY AFQRJOS ISSUE 36 – DATED 21<sup>ST</sup> FEBRUARY 2025). THE PRODUCT SHALL BE SUPPLIED COMPLYING WITH THE REQUIREMENTS SPECIFIED IN THE LATEST VERSION OF THE EI/JIG STANDARD 1530.

IN ADDITION TO THE SHORE TANK QUALITY CERTIFICATE ISSUED AT THE LOAD PORT, THE SUCCESSFUL SUPPLIER/BIDDER SHALL REQUIRE TO FURNISH MANUFACTURE'S (REFINERY) CERTIFICATES FOR JET-A- 1 CARGO LOADED ON TO THE NOMINATED VESSEL. THE PARAMETER "PARTICULATE CONTAMINATION" SPECIFIED UNDER THE SPECIFICATIONS OF AFQRJOS ISSUE 36 – DATED 21<sup>ST</sup> FEBRUARY 2025 SHOULD BE LESS THAN 1.00 mg/L AT THE PORT OF DISCHARGE AT COLOMBO.

IN ADDITION TO THE SHORE TANK QUALITY CERTIFICATES, THE SUCCESSFUL SUPPLIER/BIDDER SHALL REQUIRED TO FURNISH MANUFACTURE'S (REFINERY) CERTIFICATES FOR JET-A-1 CARGO LOADED ON TO THE NOMINATED VESSEL.

THE SUCCESSFUL SUPPLIER/BIDDER SHALL BE RESPONSIBLE TO PROVIDE MINIMUM THREE (03) NUMBER OF **STADIS** CANS ALONG WITH JET A-1 CARGO TO MAINTAIN THE CONDUCTIVITY PARAMETER OF THE PRODUCT.