St1 Sverige AB

Jet A1

Produktdata

Jet A1 uppfyller utgåva 30 av AVIATION FUEL QUALITY REQUIREMENTS FOR JOINTLY OPERATED SYSTEMS (AFQRJOS) som i sin tur omfattar:
(a) British Ministry of Defence Standard DEF STAN 91-091/Issue 10, 28 September 2018 for Turbine Fuel, Kerosene Type, Jet A-1, NATO Code F-35, Joint Service Designation: AVTUR

(b) ASTM Standard Specification D 1655-18b for Aviation Turbine Fuels "Jet A-1".

I tabellen nedan finns ett utdrag av kvalitetskraven enligt AFQRJOS . Mer information om AFQRJOS finns på http://www.jigonline.com/afqrjos/

Product data

Jet A1 meets the issue 30 of AVIATION FUEL QUALITY REQUIREMENTS FOR JOINTLY OPERATED SYSTEMS (AFQRJOS) which embodies the requirements :

(a) British Ministry of Defence Standard DEF STAN 91-91/Issue 10, 28 September 2018 for Turbine Fuel, Kerosene Type, Jet A-1, NATO Code F-35, Joint Service Designation: AVTUR.

(b) ASTM Standard Specification D 1655-18b for Aviation Turbine Fuels "Jet A-1"

The tabel below is an extract of the quality requirements according to AFQRJOS. More information about AFQRJOS is found on: http://www.jigonline.com/afqrjos/

PROPERTY		LIMITS	TEST METHOD	
			IP	ASTM
APPEARANCE				
Visual appearance		Clear, bright and visually free from solid matter and un-dissolved water at ambient fuel temperature		
Colour		Report		D 156 or D 6045
Particulate contamination mg/L	max	1.0	423	D 5452
Particulate, cumulative channel particle counts, ISO Code & Individual Channel Counts			564 or 565 or 577	
≥4 µm(c)		Report		
≥6 µm(c)		Report		
≥14 µm(c)		Report		
≥21 µm(c)		Report		
≥25 µm(c)		Report		
≥30 µm(c)		Report		
COMPOSITION				
Total Acidity, mg KOH/g	max	0.015	354	D 3242
Aromatics, % v/v.	max	25.0	156	D 1319
OR Total Aromatics, % v/v	max	26.5	436	D 6379
Sulphur, Total, % m/m	max	0.30	336	D 1266 or D 2622
Sulphur, Mercaptan, % m/m	max	0.0030	342	D 3227
OR Doctor Test		Negative	30	D 4952
Refinery Components at point of manufacture:				
Non Hydroprocessed Components, %v/v		Report (incl. 'nil' or '100%')		
Mildly Hydroprocessed Components, % v/v		Report (incl. 'nil' or '100%')		
Severely Hydroprocessed Components, % v/v		Report (incl. 'nil' or '100%')		
Synthetic Components, %v/v		Report (incl. 'nil' or '50%')		
INCIDENTAL MATERIALS				
VOLATILITY				
Distillation			123	D 86
Initial Boiling Point, ºC		Report		
Fuel Recovered				
10% v/v at ºC max		205.0		
50% v/v at ºC		Report		
90% v/v at ºC		Report		
End Point, ºC	max	300.0		

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Residue, % v/v	max	1.5		
Loss, % v/v	max	1.5		
Flash Point, ºC	min	38.0	170 or 523	D 56 or D 3828
Density at 15ºC, kg/m³		775.0 min to 840.0 max	160 or 365	D 1298 or D 4052

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PROPERTY		LIMITS	TEST METHOD	
			IP	ASTM
FLUIDITY				
Freezing Point, ºC	max	- 47.0	16 or 435 or 528 or 529	D 2386 or D 5972 or D 7153 or D 7154
Viscosity at -20ºC, mm2/s(cSt)	max	8.000	71	D 445
COMBUSTION				
Specific Energy, net, MJ/kg	min	42.80	12 or 355	D 3338 or D 4809
Smoke Point, mm	min	25.0	598	D 1322
OR				
Smoke Point, mm	min	18.0	598	D 1322
AND Naphthalenes, % vol.	max	3.00		D 1840
CORROSION				
Corrosion, Copper strip, classification (2 hours +/- 5 min. at 100 ºC +/- 1ºC)	max	1	154	D 130
STABILITY				
Thermal Stability (JFTOT)			323	D 3241
Control temperature, ºC	min	260		
Filter Pressure Differential, mm Hg	max	25		
Tube Deposit Rating (Visual)		Less than 3, no 'Peacock' or 'Abnormal' colour deposits		
CONTAMINANTS				
Existent Gum, mg/100ml	max	7	540	D 381
Microseparometer (MSEP), rating				D 3948
Fuel with Static Dissipator Additive	min	70		
OR				
Fuel without Static Dissipator Additive	min	85		
CONDUCTIVITY				
Electrical Conductivity, pS/m		50 min to 600 max	274	D 2624
LUBRICITY				
BOCLE wear scar diameter, mm	max	0.85		D 5001
ADDITIVES (Names and approval code from DEF- STAN 91-91/10 are quoted on quality certificates).				
Antioxidant, mg/l		17.0 min to 24.0 max		
in hydroprocessed & synthetic fuels (Mandatory) in non-hydroprocessed fuels (Optional)	max	24.0		
Metal Deactivator, mg/l (Optional) *	max			
First Doping		2.0		
Cumulative concentration after field re-doping		5.7		
Static Dissipator, mg/l *	max			
First Doping		3.0		
Cumulative concentration after field re-doping		5.0		

Antioxidants are mandatory in hydroprocessed fuels and synthetic fuels and shall be added immediately after hydroprocessing or synthesising and prior to the product or component being passed into storage in order to prevent peroxidation and gum formation after manufacture.

Fuel System Icing Inhibitor is not permitted unless agreed by all the participants in a joint system.

Corrosion Inhibitor/Lubricity Improver (CI/LI) additive may be added to the fuel

The types and concentrations of all additives used shall be shown on the original Certificates of Quality and on all other quality documents when they are added downstream of the point of manufacture. When additives are diluted (with hydrocarbon solvent only) to improve handling properties prior to addition, it is the concentration of active ingredient that shall be reported. See Annex A of DEF STAN 91-91/10 for detailed advice.

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	* When the original dosage of additives is unknown, it has to be assumed that first doping was applied at maximum dose rate.

Hälsa och säkerhet

Hälso-, säkerhets- och miljöinformation om produkten finns tillgänglig i Säkerhetsdatablad på www.st1.se / drivmedel. Här finns även information om produkt-märkning av drivmedel, användning, förvaring, sommar och vinterkvaliteter mm.

Health and safety

Health, safety and environmental information regarding the product is available in the Safety Data Sheet on our website www.st1.se/drivmedel. There you will also find information about product labeling of fuels, usage, storage, summer and winter quality, etc.