



Tukrmenbashi Refinery Complex

Chemical Production and Oil Refining Complex

QUALITY PASSPORT No. 23268/768

Product name: AVIATION FUEL FOR GAS TURBINE ENGINES JET A-1 (JET A-1)

TDS 32595-2013

Analysis No. 22537

from 10/08/2022

Tank No. 159

measured 3455 mm,

No.	Name of parameteres	Standard	Actually
1	Appearance a) visual assessment b) color, points on the Saybolt scale c) the content of mechanical impurities and water	Clear, transparent, must be free of water, sediment and suspended solids at ambient temperature Not standardized, definition required Absence	Pure transparent +28 Absence
2	Total acid number, mg KOH/g, not more than	0,10	0.003
3	Volume fraction of aromatic hydrocarbons, %, no more	25,0	13.5
4	Mass fraction of mercaptan sulfur, %, no more or doctoral test	0,0030 <u>negative</u>	0.0009
5	<u>Mass fraction of total sulfur, %, no more</u>	0,25	0,038
6	Fractional composition, °C: 10% is distilled off at a temperature, °C, not higher 50% distilled at temperature, °C 90% is distilled off at a temperature, °C, not higher Residue from overclocking, %, no more Losses from overclocking, %, no more	205,0 Not standardized, definition required 300,0 1,5 1,5	163 180 208 1,2 1,5
7	Flash point in a closed crucible, °C, not lower	38,0	41
8	Density at 15°C, kg/m ³	775,0-840,0	778,9
	Density at 20°C, kg/m ³		785,1
9	Freezing point, °C, not higher	minus 47,0	- 65
10	Kinematic viscosity at -20 °C, mm ² /s, max	8,000	3,800





11	Net calorific value, MJ/kg, not less than	42,80	43,48
12	Height of non-smoky flame, mm, not less than or with a volume fraction of naphthalene hydrocarbons not more than 3%, not less than	25,0 19,0	27
13	Corrosion of a copper plate (2 hours \pm 5 minutes) at a temperature of 100 °C, class, no more	1	1a
14	Thermal-oxidative stability at a test control temperature of at least 260°C for 2.5 hours: Pressure drop across the filter, kPa (mm Hg), no more Color of deposits on the tube, (in the absence of uncharacteristic deposits), no more	3,3 (25) 3	2.6
15	Concentration of actual resins, mg/100 cm ³ , no more	7	
16	Interaction with water: a) assessment of the interface, points, no more b) assessment of the light transmission of the fuel with a microseparometer, not less than: with antistatic additive without antistatic additive	1b 70 85	1b
17	Electrical conductivity, pS/m, for fuel: Without antistatic additive at 20 °C, max. With antistatic additive (at aircraft fueling temperature), min. With antistatic additive at a temperature of 20 °C, no more	10 50 600	-
18	Lubricity, wear scar diameter, mm, not more than	0,85	-

