

GAZPROM ESPO Crude Gost 51858-2002

ESPO crude quality specifications			
Test	Units	Method	Result
Density at 15oC	kg/L	ASTM D 5002	0.8508
Specific Gravity at 60/60°F	kg/L	ASTM D 5002	0.8512
API gravity		ASTM D 1250	34.
Kinematic viscosity at 20°C	CST	ASTM D 445	6.949
Total acid Number	mg KOH/g	ASTM D 664	<0.050
Pour Point	°C	ASTM D 5853	<=-36
Water by distillation	mass%	ASTM D 4006	0.35
Sediment by extraction	mass %	ASTM D 473	0.01
Chloride salt content	mg/dm3	GOST 21534-75(A)	17
Organic chlorine content	mg/kg	ASTM D 4929(B)	*1
Sulphur content	mass%	ASTM D 4294	0.535
Hydrogen Sulphide	ppm	UOP 163	less 1
Mercaptan Sulphur	ppm	UOP 163	111
Ash content	mass %	ASTM D 482	0.011
Nickel	ppm	IP 470	4
Sodium	ppm	IP 470	1
Iron	ppm	IP 470	19
Copper	ppm	AAS	less 1
Vanadium	ppm	IP 470	4
Calcium	ppm	IP 470	2
Paraffin Wax content	mass %	UOP 46	3.3
RVPE	kPa	ASTM D 5191	40.4
Asphaltenes (heptane insolubles) content	mass %	IP 143	0.20
Distillation		ASTM D 5236	
Cut Range (°C)	Cum % vol		
LPG	% vol.		2.2
C5-65	% vol.		6.1
65-100	% vol.		9.8
100-150	% vol.		16.7
150-200	% vol.		25.1
200-250	% vol.		32.7
250-300	% vol.		42.0
300-350	% vol.		50.9
350-370	% vol.		54.2
370-475	% vol.		70.0
475-515	% vol.		74.6
515-525	% vol.		76.0
525-553	% vol.		79.9

GAZPROM Jet Fuel A1 GOST R52050:2006

AVIATION KEROSENE TYPE JET A-I RUSSIAN ORIGIN PER GOST R 52050:2006 STANDARDS		
PHYSICAL PROPERTIES:	RESULT	TEST STANDARD
COMPOSITION: Appearance Color		
	Clear and bright Report	Visual D156, D6045 D3242, IP 354
Acidity, Total mg KOH/g	0.10	D1319, IP 156, GOST R 52063
Aromatics, (vol %)	25.0	D1266, D1552, D2622, D4294, D5453, IP107, IP243, IP336, IP373, IP447,
Sulphur, Total (wt. %) Max Max. Max.	0.25	GOSTR 51947, GOST R 51859 D3227, IP342, GOST R 52030
Sulphur, Mercaptan (wt. %)	0.0030	D4942, IP30
Or Doctor's report Max.	Negative	
VOLATILITY: Distillation temperature:		
10% vol at °c Max.	205.0 Report	D86, IP123
50% vol at °c	Report	
90% vol at °c Max. Max.	300.0	
Final boiling point °c	1.50	
Distillation Residue (vol %) Max. Min.	1.50	D56, D3828, IP170
Distillation Loss (vol %) Flash Point CC)	38.0	D1298, D4052, IP160, IP365, GOST R
Density@ 15°C (kg/m3)	775.0-840 0	51069
FLUIDITY: Freezing Point (°c) Max		
	-47.0	D2386, D5972, D7153, IP16, IP435, IP529,
Viscosity @ -20 °C cst Max.	8	D445 IP71

COMBUSTION:			
Net Heat of Combustion (MJ/kg)		42.80	
Smoke Point (mm)	Min.	25	D3338, D4529, D4809, IP12, IP355
Or Smoke Point (mm)	Min.	19	D1322, IP57
And Naphthalenes (vol %)	Max.	3	D1840

CORROSION:			
Copper Strip (2 hrs @ 100°C)	Max.	No. 1	D130, IP154
THERMAL STABILITY:			
JFTOT ? P @ 260QC (mm Hg)	Max.	25	D3241, IP123
Tube Ratin isual	Max.		
CONTAMINANTS:			
Existent Gum (mg/ 100 cm3)			
Water Reaction Interface Rating		7	
MSEP Rating	Max.	1b	[)381, IP131
Fuel without SDA	Max.	85	D1094
Fuel with SDA	Min.	70	
Particulates (dm3	Max.	1.0	D5452, IP423
OTHER:			
Conductivity (PS/m)		50-600	
Without SDA	Max	10	D2624, IP274, GOST 25950
BOCLE Wear scar Diameter mm	Max.	0.85	D5001
ADDITIVES:			
Antioxidant		Optional (24mg/L Max.)	
Static Dissipator		Optional	
Lubricity Improver		Optional	

GAZPROM LIGHT CYCLE OIL (LCO) GOST 56871-2016

COMPONENT	UNIT	METHOD	LIMITS
Density (20°C)	Kg/l	ASTM D4052	Min 0.86 to Max 0.88
Ash Content	Wt. %	ASTM D482	Max 0.01
CFPP	°C	ASTM D6371	Report
Chroma	ASTM color	ASTM D1500	L1.0
Pour Point	°C	ASTM D97	Min-12°C
Sulphur	Wt. % (Mass fraction)	ASTM D4294	<0.05
Total Aromatics	Wt. % (Mass fraction)	IP391	Min 51
Temperature of the flash	°C	ASTM D93	65°C
Kinematic Viscosity 50 °C	cSt	ASTM D445	2.5 ~ 4.5
Distillation			
Initial Boiling Point	°C	ASTM D86	Max 180
50% Recovered	°C	ASTM D86	Max 280
90% Recovered	°C	ASTM D86	Max 360
Final Boiling Point	°C	ASTM D86	Report
Carbon Residue	% (Mass fraction)	ASTM D4530	<0.0%
Cetane number	-	ASTM D976	Min 41
Water content	%	ASTM D95	0.00%
Toluene	% (Volume fraction)	ASTM D5580	<1.0
Benzene	% (Volume fraction)	ASTM D5580	<0.1
Xylene	% (Volume fraction)	ASTM D5580	<1.0
Olefin content	% (Volume fraction)	ASTM D1319	4
Naphthalene	% (Mass fraction)	ASTM D2425	1.3 ±0.1
Aromatic Content	% (Volume fraction)	ASTM D1319	54±1
Saturated hydrocarbon	% (Volume fraction)	ASTM D1319	41

GAZPROM PETROLEUM COKE (PETCOKE) GOST 22898-75

COMPONENTS	LIMITS
Moisture	</=8%
Ash content (On a dry basis)	<0.3%, not more than 0.5%
Sulfur content (On a dry basis)	</=3%
Volatile content (On a dry basis)	Min. >8%, Max. <12%
Shot Coke	0% (Buyer has the right to reject)
HGI	75-80
Vanadium (V)	</=300ppm, not more than 400ppm
Ferrum (Fe)	<30ppm
Silicon (Si)	<200ppm
Calorific Value, Kcal/kg	Min. 8200
Size <8mm	<75% (Size of the product <8mm shall less than 75%)
Size <1mm	<5% (Size of the product <1mm shall be less than 5%)

NOTE: Pet Coke for burning purposes only.