SPECIFICATION EN590 – 10PPM

The passport was issued on the basis of the test report No. 792249 dated 17.07.2025

CHARACTERISTICS	TEST METHOD	UNITS	LIMIT	RESULTS
Sulphur Content	mg/kg	D5453	Max 10	10
Cetane Index	-	D4737	Min 46.0	53.1
Density @	°C	D86	-	-
-50% vol Recovered	°C	D86	Report	273.0
-90% vol Recovered	°C	D86	Max 360	337.1
-95% vol Recovered	°C	D86	Report	355.6
Flash Point , PMCC	°C	D93	Min 60.0	71.0
Kinematic Viscosity @40 °C	cSt	D445	2.0 - 4.5	3.015
Conradson Carbon Residue(10% bottoms)	%wt	D189	Max 0.20	0.02
Pour Point	°C	D97	Max -7	-9
Ash Content	%wt	D482	Max 0.01	<0.010
Water Content	mg/kg	D6304	Max 200	85
Particular Contaminant	mg/l	D6217	Max 10	2.4
Copper strip corrosion (3Hrs @ 50 °C)	-	D130	No.1	No.1A
Density @15 °C	kg/m3	D4052	820.0 – 860.0	840.4
Lubricity	Microns	D6079	Max 460	350
Appearance	-	D4176	Bright & Clear	Bright & Clear
Colour ,ATSM	-	D1500	Max 2.0	L 1.0
Strong Acid Number	mgKOH/g	D974	Nil	Nil
Total Acid Number	mgKOH/g	D974	Max 0.25	0.03
Sediment by Extraction	%wt	D473	Max 0.05	0

PETROLEUM COKE

The passport was issued on the basis of the test report No. 802391 dated 17.06.2025

PARTICULAR	PETROLEUM COKE
Fixed carbon WT%	86 - 89
SULPHUR	**0.5%**
VOLATILE	7-12
MOISTURE	3%
ASH	0.6 - 1.35
HGI	40 -70
ADB	8100 KCAL
HYDROGEN	< 5%
GCV	7800 KCAL/kg
CALORIFIC VALUE KCAL/kg	14,000 BTU / lb
CV(net)	7800 KCAL/kg
NITROGEN	1.89%
NICKLE(ppm)	200
VANADIUM	80
IRON ORE	199 (fe)
BULK DENSITY	900-100kg/m3
SIZE	20-40mm

CRUDE OIL (ESPO)

Standard Specification of Eastern Siberian Pacific Pipeline Oil (ESPO)				
No	**Test**	**Method**	**Unit**	**Result**
1	Density At 15°C	ASTM D1298	Kg/L	0.8508
2	API Gravity	ASTM D1250	-	34
3	Kinematic Viscosity at 20°C	ASTM D445	cst	6.949
4	Sulphur Content	ASTM D4294	% Mass	0.535
5	Ash Content	ASTM D482	% Mass	0.011
6	Total Acid Number	ASTM D664	Mg KOH	< 0.50
7	Pour Point	ASTM D5853	°C	<= -36
8	Sediment By Extraction	GOST 21534-75 (A)	% Mass	0.01
9	RVPE	ASTM D5191	kPa	40.4
10	Hydrogen Sulphide	UOP 163	ppm	<1
11	Chloride Salt Content	ASTM D473	% Mass	17
12	Organic Chlorine Content	ASTM D4929 (B)	Mg/Kg	*1
13	Mercaptan Sulphur	UOP 163	ppm	111
14	Vanadium	IP 470	ppm	4
15	Nickel	IP 470	ppm	4
16	Iron	IP 470	ppm	19
17	Calcium	IP 470	ppm	2
18	Sodium	IP 470	ppm	2
19	Copper	AAS	ppm	<1
20	Water By Distillation	ASTM D4006	% Mass	0.35
21	Paraffin Wax Content	UOP 46	% Mass	3.3
22	Asphaltenes Content	IP 143	% Mass	0.20
23	TBP Distillation	ASTM D5236	Vol%	-

JET A1

JET – A1 SPECIFICATIONS

ANALYTICAL PRODUCTS SPECIFICATIONS JET FUEL A1					
PROPERTIES	**UNIT**	**RESULT**	**TEST-IP**	**METHOD**	**ASTM**
ADDITIVES					
Antioxidant in hydro processed fuel	Mg/l	Min	17		
Antioxidant non hydro processed fuel	Mg/l	Max	24		
Static dissipater first doping ASA-3	Mg/l	Max	24		
Stadis 450	Mg/l	Min	1		
COMBUSTION PROPERTIES					
Smoke point	mj/kg	Min	18.4		D4808
Specific energy, net	Mm	Min	19		D1322
Luminomitter number		Min	45		D1740
Naphthalenes	% volume	Max	3		D1840
COMPOSITION					
Total Acidity	Mg KOH/g	Max	0.01	354	D3242
Aromatics	% vol	Max	22	158	D1318
Sulphur, Total	% mass	Max	0.30	107	D1266/2622
Sulphur, Mercaptan	% mass	Max	0.003	342	D3227
Doctor, test				30	D4952
VOLATILITY					
Initial Boiling Point	Centigrade	Max	Report	176	D96
- 10% vol at °C			210		
- 20% vol at °C			Report		
- 50% vol at °C			Report		
- 80% vol at °C			Report		
End point	Centigrade	Max	300		
Recovered residuals	% Vol	Max	1.5		
Loss	% Vol	Max	1.5		
Flash Point	Centigrade	Max	42	170/303	D56/3828
Density at 15 °C	Kg/m2	min/max	776/840	180/305	D1256
LOW TEMPERATURE					
Freezing Point	Centigrade	Max	-47	15	D2256
CORROSION					
Corrosion, copper (2hrs at 100 °C)		Max	1	154	D130

LNG

LNG Specification

COMPONENT	SUBSTANCE PERMISSIBLE LIMITS
GROSS HEATING VALUE (GCV) RANGE	9,340 – 10,400 KCAL/SCM (1,050 – 1,170 BTU/SCF)
METHANE	NOT LESS THAN 80.0 MOL %
ETHANE	NOT MORE THAN 8.7 MOL %
PROPANE	NOT MORE THAN 3.00 MOL %
BUTANES AND HEAVIER	NOT MORE THAN 2.00 MOL %
PENTANES AND HEAVIER	NOT MORE THAN 0.75 MOL %
NITROGEN	1.0 MOLECULAR %
TOTAL SULPHUR	10.0 PPM (V)
SULPHUR IN FORM OF HYDROGEN SULPHIDE	10.0 PPM (V)
MAXIMUM VARIATION IN WOBBE INDEX (WI) [WI = LHV (VOLUMETRIC BASIS) / (SPECIFIC GRAVITY W.R.T. AIR)0.5]	+/- 5.0 %
CONTAMINANTS	NIL
(A) TRACE METALS	NIL
I. PB + ZN	0.50 PPM (V)
II. NA + K	0.30 PPM (V)
III. VANADIUM	0.50 PPM (V)
IV. CALCIUM	2.0 PPM (V)
V. MAGNESIUM	2.0 PPM (V)
VI. SUM OF HEAVY METALS (HG+V+PB+ZN+NI+OTHERS)	1.0 PPM (V)
(B) SOLIDS / PARTICULATES	
I. TOTAL FOR PARTICLE SIZE UP TO 10 MICRONS	
II. FOR 2 MICRON < D < 10 MICRONS	20.0 PPM (V)
III. FOR PARTICLE SIZE GREATER THAN 10 MICRONS	1.50 PPM (V)
	0.30 PPM (V)
(C) LIQUID CONTENTS	NIL
(D) MOISTURE	112 KG/MILLION SCM
HYDROGEN CONTENT	1.00 % (BY VOLUME)
ACETYLENE (C2H2)	0.10 % (BY VOLUME)
HIGHER HYDROCARBONS FOR N>=3	10.0 % (BY VOLUME)