



SPECIFICATION OF COMMODITIES

UREA N46 GRANULAR

Nitrogen	46% minimum
Moisture	0.5 max
Free ammonia	160 PXT PPM maximum
Biuret	1.0% maximum
Harmful substances	100 % free from harmful substances
Melting point	132 degree Celsius
Granulation	1mm to 4mm 90% minimum
Color	White standard or white pure
Odor	Odorless
Boiling	Decomposes before boiling
Radiation	Non-radioactive
Physical state	Solid@20°C, 101 KPA white granules
Specific gravity	Solid@20° C-1.35 t/ms
Floatability in water	Sinks and mixes
Molecular weight	60.065
Fertilizer granular	Particle Size: 2-4 mm. (90% minimum as wt)
Fisher	0.30%



UREA N46 PRILLED

Nitrogen	46% by weight minimum
Moisture.	0.5% max by method of drying
Fisher	0.3% Max. Dryer
Biuret	1,0% max. by weight
Anti-Caking Agent	Treated against Anti-Caking
Free ammonia	160 PXT PPM maximum
Granulation	0,85 – 3,35 mm not less than 90 %
Melting point	132 degrees centigrade
Solubility in water at 20°C	100g/100 ml of water
PH of 10 % solution	7.5 – 10.0 units
Color	Standard White or Pure White
Critical Relative Humidity (30°C)	73 %
Quality	Free flowing, non clotted Free from harmful substances
Physical State	Solid at 20°C, 101 KPA white granules
Specific Gravity	Solid at 20°C, - 1.335 t/m
Molecular Weight	60.065
Physical Presentation	Spherical beads or pellets, white
Apparent density (kg/m ³)	770 – 809 kg/m ³
Salinity Index	75.4



**COMMERCIALLY
CONFIDENTIAL**

**DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9**

NPK (23:10:5) GRANULAR

Nitrogen	23%
Moisture	1% max
Phosphate (P2O5)	10%
Potassium (K2O)	5%
Sulphur (S)	6%
Zinc (Zn)	1%
Granulation	2mm to 5mm 90% minimum
Color	White standard or white pure

**COMMERCIALLY
CONFIDENTIAL**

**Gültepe Mah. Çimenli Sokak 24/33 Altındağ-Ankara
icanozer@cbis-group.net
www.cbis-group.net**



DI AMMONIUM PHOSPHATE

Moisture % by weight, maximum	2.5
Total N % by weight, minimum	18
Ammonical nitrogen % by weight, minimum	15.5
Available Phosphorus (as P ₂ O ₅)% by weight, minimum	46.0
Water Soluble Phosphorus (as P ₂ O ₅)% by weight, minimum	39.5
Particle size:	Minimum 90% of the material be retained on 1 mm and 4 mm IS sieve



BITUMEN 60-70

TEST	UNIT	LIMIT	SPECIFICATION
DENSITY@25C°	Kg/m2	1.01-1.6	ASTM D70 or ASTM D3289
PENETRATION@25C°	Mm/10	60-70	ASTM D5
Softening Point	C°	49-56	ASTM D36
Ductility@25C°	CM	100 MIN	ASTM D113
Loss on heating	Wt%	0.2 MAX	ASTM D6
Flash point	C°	232 MIN	ASTM D92
Solubility in Trichloroethylene	Wt%	99.5	ASTM D2042
Viscosity@135 C°	cSt	300 MIN	ASTM D2170
Retained Penetration (T.F.O.T)	%	54 MIN	ASTM D5
Ductility, (25C°),5cm/min,after TFOT	CM	50	ASTM D113



ANODE GRADE PETROLEUM COKE

ITEM	INDEX NAME	TEST METHOD	STANDARD ACC. TO TS 0258-080-99418673-2008	ACTUAL VALUE
1	Mass fraction of moisture, %, not more than	GOST 27588-91	3	10
2	Mass fraction of volatiles,%	GOST 22898-78 cl. 4.9	not more than 10	9
3	Ash content, %	GOST 22692-77	not more than 0.6	0.1
4	Mass fraction of sulfur, %	GOST 1437-75	not more than 1.5	1.4
5	Mass fraction of minor items (pieces less than 8 mm in size), %	GOST 22898-78 cl. 4.3	not more than 50	50
6	Actual density after calcining at 1300°C for 5 hours, g / cm ³	GOST 22898-78 cl. 4.4	2.08-2.15	2.13
7	Mass fraction, %	GOST 22898-78 cl. 4.6		
	silicon		not more than 0.08	0.03
	Iron		not more than 0.08	0.01
	vanadium		not more than 0.015	0.015
	Quality indicators of calcinated anode blocks:			
1	Volume density, kg/dm ³	TS 48-5-148 [1]	1.50-1.62	-
2	Sample remainder in the reaction in the current of CO ₂ (CRR), %	ISO 12988-1-2017 [2]	75.0-96.0	-
3	Sample remainder in the reaction in the current of air (CRR), %	ISO 12988-1-2017 [3]	55.0-95.0	-
4	Specific electrical resistance, μOhm·m	GOST 23776-79	51.0-74.0	-
	Quality indicators of burned samples of the Soderberg mass:			
1	Compressive strength, MPa	STO 03.04.09-2012 (method of TS 48-5-80-86)	not less than 30	32*
2	General destructibility in the flow of CO ₂ , mg/cm ² ·h	STO 03.04.09-2012 (method of TS 48-5-80-86)	not more than 40	14*
3	Specific electrical resistance, μOhm·m	STO 03.04.09-2012 (method of TS 48-5-80-86)	not more than 80	75*



FUEL GRADE (GREEN DELAY) PET COKE

Test	Unit	Method	Daf	Dry	Ar
Moisture	mass %	ISO 589	-	-	4.69
Ash	mass %	ISO 1171	-	1.15	1.10
Volatiles Matters	mass %	ISO 562	12.53	12.38	11.80
Sulphur	mass %	ASTM D 4239	4.12	4.08	3.88
Fix Carbon	mass %	Calculate	87.47	86.47	82.41
Calorific Value (Ho)	kJ/kg	ISO 1298	35285	34879	33243
Calorific Value (Ho)	kcal/kg	ISO 1298	8428	8331	7940
Calorific Value (Hu)	kJ/kg	ISO 1298	34437	34041	33987
Calorific Value (Hu)	kcal/kg	ISO 1298	8225	8131	8118

Test	Unit	Method	Results
Hardgrove Index	-	ISO 5074	60
HGI Recovered between No. 1	mass %	ISO 5074	34.1
Vanadium pentoxide (V2O5)	mg/kg	DIN 51729-11	324
Nickel oxide (NiO)	mg/kg	DIN 51729-11	79



PRECIPITATED BARIUM SULFATE (BASO4)

No	Items	Specification	Results
1	Average particle size	1.5±0.2µm	1.5
2	Whiteness	98±1	98
3	Oil Absorption	14-17%	15
4	Moisture	0.2%max	0.15
5	PH Value	7.5-9.5	7.8
6	BaSO4 Purity	98%min	98.3
7	HCL Insoluble Matter	98.6%min	98.8
8	True Specific Gravity	4.3G/cm3	4.3
9	Water- Soluble	0.2%max	0.1

Usage: The product are widely used in paint, printing ink, plastics, coating, enamel, glass, electronic, cosmetic, medicament, and food etc.



NATURAL BARIUM SULFATE (BASO4)

No	Items	Specification
1	Apperance	White Powder
2	D50 (µm)	36 max
3	D97 (µm)	52 max
4	Moisture	0.02% max
5	Specific Gravity	4.2 g/cm ³
6	BaSO4 Purity	70-95%
7	Residue Grater Than 75 µm	0.97%
8	SiO ₂ Content	0.16% max
9	Fe ₂ O ₃ Content	22% max
10	SiO ₂ Content	0.16% max
11	BaO Content	0.01% max
12	MgO Content	0.01% max
13	CaO Content	0.50% max
14	Cu Content	0.3
15	As Content	1.5
16	Cd Content	0.07
17	Water- Soluble	0.03% max



EN590 - 10 PPM

TEST	UNITS	LIMITS	METHOD
Density at 15°C *	kg/m ³	820.0 – 860.0	ASTM D4052
ASTM Color *		2.0 Max.	ASTM D6045
Flash Point P.M.C.C*	°C	60 Min.	ASTM D93A
Total Sulphur	mg/kg	10 Max.	ASTM D2622
Copper Corrosion, 3hrs at 100°C		1.0 Max.	ASTM D130
Kinematic Viscosity at 40°C	cSt	2.0 – 4.5	ASTM D445
Pour Point *	°C	+6 Max.	ASTM D5950
Ash Content	wt%	0.01 Max.	ASTM D482
Water Content	mg/kg	200 Max.	ASTM D6304
Sediments by Centrifuge	vol %	0.01 Max.	ASTM D2709
Derived Cetane Number		51 Min.	ASTM D6890
Cetane Index		46 Min.	ASTM D4737A
FAME Content	vol %	7.0 Max.	EN 14078
Lubricity (HFRR)(WSD) @ 60°C		460 Max.	EN 12156-1
<u>Distillation</u>			
50 % Recovery	°C	Report	ASTM D86
90 % Recovery	°C	Report	
95 % Recovery	°C	360 Max.	
F.B.P	°C	Report	



D6 DIESEL

Method Units	Test	Result	Unit
ASTM D5002	Density and Relative Density of Crude Oils Average API Gravity	29.7 (29.7) (Min)	API
ASTM D1298-99	Density @15 Deg C	0.87 (0.8775) (Max)	Kg/t
ASTM D97	Pour Point of Petroleum Products Pour Point Pour Point	< -33 (-36) (BELOW ZERO) < -27.4 (-32.8) (BELOW ZERO)	°C °F
ASTM D93-IP34	Pensky-Martens Closed Cup Flash Point Corrected Flash Point	117 (137) (MIN)	°F
ASTM D4294	Sulfur Content in Petroleum Products by EDXRF Sulfur Content	0.38 (0.358) (MAX)	Wt%
ASTM D445	Kinematic/Dynamic Viscosity Kinematic Viscosity @ 122°F / 50°C	17.83 (18.12) (MAX)	Mm2/s
ASTM D6304	Water Content by Coulometric Karl Fisher Titration Water Content	0.20 (0.7) (MAX)	Wt%
ASTM D482	Ash from Petroleum Products Average Ash	0.279 (1.007) (MAX)	Wt%
ASTM D2161	Conversion of Kinematic Viscosity To SUS/SFS 1Saybolt furol viscosity 122°F	10.9SFS	(MAX)
ASTM D5184	Aluminum and Silicon in Fuel Oils by ICP-AES or AAS Aluminum Content Silicon Content	102 (MAX) 93 (MAX)	Mg/kg Mg/kg
ASTM D95	Water by Distillation, Vol%	0.70 (MAX)	Vol%
ASTM D4530.06	Carbon Residue	1.11 (MAX)	Wt%
Method Test Result Units			
IP 143 Asphaltene Heptane Insolubles			
	Asphaltene Content	0.08	Wt%
IP 501 Determination of AL,Si,V,Ni,Fe,Na,Ca,Zn,P in Fuel Oil-ICPES			
	Aluminium	372	mg/kg
	Silicon	187	mg/kg
	Sodium	117	mg/kg
	Vanadium	1	mg/kg
	Calcium	779	mg/kg
	Zinc	298	mg/kg
	Phosphorus	4176	mg/kg
	Iron	545	mg/kg



LIQUIFIED NATURAL GAS (LNG)

SPECIFICATION:

ELEMENT	WET	DRY
Methane	84,6%	96,0%
Ethane	6,4%	2,0%
Propane	5,3%	0,6%
Iso-Butane	1,2%	0,18%
N-Butane	1,4%	0,12%
Iso-Pentane	0,4%	0,14%
N-Pentane	0,2%	0,06%
Hexanes	0,4%	0,10%
Heptanes	0,1%	0,80%
Carbon Di-Oxide		0-5%
Helium		0-5%
Hydrogen Sulphide		4.8 mg/Nm ³ maximum
Total Sulphur		28.0 mg/Nm ³ maximum
Nitrogen		2-10%
Argon		0-0.1%
Specific Energy	Minimum 1050 Btu/SCF	Maximum 1150 Btu/SCF
Minimum 9532 Kcal/Nm ³		Maximum 10,440 Kcal/Nm ³
Calorific Value	Minimum 36.4 MJ/m ³	Maximum 40.9 MJ/m ³
Chemical Symbol		CH ₄
Molecular Weight		16
Normal Boiling Point		-161°Celsius
Freezing Temperature		-183°Celsius
Critical Temperature		-82°Celsius
Critical Pressure		47 bar absolute
Density of Saturated Liquid		424 kg/m ³
Relative Gas Density		0.56 kg/m ³
Latent Heat of Vaporization		512.4 KJ/kg
Flame Temperature		1880°Celsius
Limiting Oxygen Index		11.5% by volume



LIQUIFIED PETROLEUM GAS (LPG)

Specifications Required for the Propane - Butane (Mixed)

GENERAL	LPG
Conforming to Indian Standard specifications	IS 4576/IS 14861
Vapor Pressure at 65 °C (Max) Kg/cm ²	16,87
Volatility. Evaporation temp, in °C For 95% volume at NTP	2
Copper strip corrosion at 38 °C	Not Worse Than 1
Dryness	No free entrained water
Odour	Level 2
CHEMICAL COMPOSITION	
Ethane %	1 max
Propane %	38 max
Is-Butane %	19 max
Nor-Butane %	41 min
Iso-Pentane and olefins %	1 max
Volatile sulfur %	0.003 max
LIQUID	
Density at 15 °C Kg/liter	0,557
Volume of liquid per kg at 15 °C Liters	1,85
Vapor pressure at 15 °C Bar	5,3
Gross Calorific Value Kcal/kg	11840
Net Calorific Value Kcal/kg	10920
Boiling Point at atmospheric pressure °C	0
VAPOR	
Density at 15 °C Kg/m ³	2,21
Volume of gas per kg at 15 °C m ³	0,48
Latent heat of vaporization at 15 °C (Kcal/kg)	86
Gross Calorific Value Kcal/Nm ³	26200
Net Calorific Value Kcal/Nm ³	24100
Air required for combustion m ³ /m ³	29



LIQUIFIED PETROLEUM GAS (LPG)

Name of indicator	Test method	Norm according to the normative		Result tests
		GOST R 52087-2018	TREAES036 2016*	
1. Mass fraction of components, %	GOST 10679	Not standardized Definition required 50=10 Not standardized Definition is mandatory no more than 6.0	-	4.357
- Total of methane, ethane and ethylene				
- Amount of propane				
- Amount of butane and butylene				
- Total of unsaturated hydrocarbons, %				
2. Volume fraction of the liquid residue at a temperature + 20 °C. %	GOST R 52087 Clause 8.2	no more than 1.6	no more than 1.6	0.70
3. Saturated vapor pressure, gauge, MPa, the temperature of: + 45 °C - 20 -C**	GOST 28656	not more than 1.6 not less than 0.07	no more than 1.6 no less than 0.07	1.30 0.14
4. Mass fraction of hydrogen sulfide and mercaptan sulfur, % including hydrogen %sulfide. %	GOST 22985	no more than 0.01 no more than 0.003	no more than 0.01 no more than 0.003	0.0035 less than 0.0002
5. Content (presence) of free water and alkali	GOST R 52087 Clause 8.2	absence	absence	absence
6. Odor	GOST EM 589 Appendix A	Characteristic unpleasant at a concentration in air of 20 % vol. At lower than flammability limit	Unpleasant and characteristic at a concentration in the air of 20% of the lower than flammability limit	Unpleasant characteristic odor
7. Octane	GOST 589 Appendix B	not less than 89.0	not less than 89.0	89.8
8. Density at 20 °C, kg m ³ ***	GOST 28656	-	-	519.6
9. Density at 15 °C, kg m ³ ***	GOST 28656	-	-	527.7

* The standard for liquefied hydrocarbon gases used as a motor fuel or road transport does not comply with the requirements of the Technical Regulations of the Eurasian Economic Union 'Requirements for liquefied hydrocarbon eiders for their use as fuel' (TREAES 036 2016).

** The pressure of saturated vapors of liquefied hydrocarbon gases at a temperature of - 20 °C is determined by roofing felt in the winter period (from October 01 to June 01).

*** The indicator is determined by the demand of the consumer.



POLY VYNIL CHLORIDE (PVC) RESIN

Index of Suspension Method
Multipurpose Poly Vinyl Chloride Resin

ITEM		SG3 SUPERIOR	SG5 SUPERIOR	SG7 SUPERIOR	SG8 SUPERIOR
VISCOSITY NUMBER (ml/g)		135-12 (72-71)	118-107 (68-66)	95-87	86-73 (59-55)
NUMBER OF IMPURITY PARTICLE		16	16	20	20
VOLATILE MATTER AND MOISTURE CONTENT (%)		0.3	0.4	0.4	0.4
APPEARANCE DENSITY(g/mL)		0.45	0.48	0.5	0.5
RESIDUAL AFTER SIEVE	≤ 0.25 mm	2	2	2	2
	≥ 0.063 mm	95	95	95	95
-NUMBER OF GRAIN/ (EACH/400cm3)		20	20	30	30
PLASTICIZER ABSORBENCY VALUE OF 100g PVC/g >		26	19	12	12
THERMAL STABILITY(WHITENESSDEGREE)(160°C, 10 min)/%		78	78	75	75
RESIDUAL CHLORE THYLENE CONTENT/ (µg/g)		5	5	5	5

ITEM		WP62GP	WP67SFL	WP74GP
VISCOSITY NUMBER(ML/G)/K VALUE		105-85	118-107	95-87
IMPURITY PARTICLE NUMBER/PCS		16	16	20
VOLATILE (INCLUDING WATER) MASS FRACTION %		0.3	0.4	0.4
APPARENT DENSITY (G/ML)		0.45	0.48	0.5
SIEVE RESIDUE MASS FRACTION/%	≤ 0.25 MM	2	2	2
	≥ 0.063 MM	95	95	95
FISH EYE NO. (PCS/400CM2)		20	20	30
100G RESIN PLASTICIZER ABSORPTION/G		26	19	12
WHITENESS (160°C, 10MIN) /%		78	78	75
RESIDUAL CHLORE THYLENE CONTENT/(MG/G)	TECHNICAL GRADE	5	5	5
	FOOD GRADE	5	5	5
DICHLOROETHANE (MG/KG)	TECHNICAL GRADE	-	-	-
	FOOD GRADE	150	150	150



CAUSTIC SODA

PARAMETER	SUPERIOR CLASS	FIRST CLASS	STANDARD	ACTUAL INSPECTION VALUES
NaOH % \geq	99.0	98.5	98.0	98.5
NaCl % \leq	0.03	0.05	0.08	0.02
Fe ₂ O ₃ % \leq	0.005	0.008	0.01	0.004
Na ₂ CO ₃ % \leq	0.5	0.8	1.0	0.25

Applicable Standard: GB 209-2006 IS-IT-I



COMMERCIALLY
CONFIDENTIAL

DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9

**POLY ALUMINIUM CHLORIDE
(INDUSTRIAL GRADE)**

Characteristic physico-chemical data

Properties	Units	Guarantee Value	Typical Value
Alumina (Al ₂ O ₃) Content	%	≥29	30.15
Basicity	%	40-90	83.9
Water Insoluble	%	≤1.5	0.3
PH Value (1% Solution)		3.5-5.0	3.8
Fe	%	≤3.5	conforms
As	%	≤0.000 5	conforms
Cd	%	≤0.001	conforms
Cr	%	≤0.005	conforms
Hg	%	≤0.000 05	conforms
Description	Yellow Powder		
Quality Standard	GB/T22627-2014		
Package	25Kg/Bag		

COMMERCIALLY
CONFIDENTIAL

Gültepe Mah. Çimenli Sokak 24/33 Altındağ-Ankara
icanozer@cbis-group.net
www.cbis-group.net
17 / 28



**POLY ALUMINIUM CHLORIDE
(DRINKING GRADE)**

Characteristic physico-chemical data

Properties	Units	Guarantee Value	Typical Value
Alumina (Al ₂ O ₃) Content	%	≥29	30.35
Basicity	%	40-90	80.65
Water Insoluble	%	≤0.6	0.2
PH Value (1% Solution)		3.5-5.0	4.0
As	%	≤0.000 2	0.000 15
Pb	%	≤0.001	0.000 89
Cd	%	≤0.000 2	0.000 1
Hg	%	≤0.000 01	0.000 001
Cr ⁶⁺	%	≤0.000 5	0.000 4
Appearance	Light Yellow Powder		
Quality Standard	GB15892-2009		
Package	25Kg/Bag		



COMMERCIALLY
CONFIDENTIAL

DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9

**POLY ALUMINIUM CHLORIDE
(HIGH-PURITY GRADE)**

Characteristic physico-chemical data

Properties	Units	Guarantee Value	Typical Value
Alumina (Al ₂ O ₃) Content	%	≥29	30.05
Basicity	%	40-90	50.66
Water Insoluble	%	≤0.6	0.1
PH Value (1% Solution)		3.5-5.0	4.0
As	%	≤0.0002	0.000056
Pb	%	≤0.001	0.00058
Cd	%	≤0.0002	0.0000037
Hg	%	≤0.00001	0.0000005
Cr+6	%	≤0.0005	0.00009
Appearance	White Powder		
Quality Standard	GB15892-2009		
Package	25Kg/Bag		

COMMERCIALLY
CONFIDENTIAL

Gültepe Mah. Çimenli Sokak 24/33 Altındağ-Ankara
icanozer@cbis-group.net
www.cbis-group.net
19 / 28

WOOD PELLET

S/N	Characteristics	Unit	Standard	Actual result	Uncertainty
1	Total Moisture Content, Mar	%	LVS EN ISO 18134-1	7,1	+/-0,2
2	Ash Content, Dry Basis, A 550 °C	%	LVS EN ISO 18122	0,50	+/-0.02
3	Gross Calorific value at constant volume Q gr as received. V=const.	MU/kg, Kcal/kg, MWh/t	EN ISO 18125	19.19 4583 5.33	+/-0.5%
4	Net Calorific value at constant pressure Q net as received. P=const.	MU/kg, Kcal/kg, MWh/t	EN ISO 18125	17,76 4243 4,93	+/-0.5%
5	Bulk density, BD	Kg/m ³	LVS EN ISO 17820	670	+/-10
6	Chlorine content. dry basis, Cl	%	LVS EN ISO 16994	0.002	+/-0.001
7	Nitrogen content, dry basis, N	%	LVS EN ISO 16948	0,12	+/-0.02
8	Sulphur content, dry basis, S	%	LVS EN ISO 16994	0,008	+/- 0.002
9	Mechanical Durability, at moisture content, a.r.b.	%	LVS EN ISO 17831-1	98	+/-0.2
10	Fines content/dry sieve test/- less than < 3,15 mm	%	LVS EN ISO 18846	0,31	+/-0.02
11	Average Diameter. D av	mm	LVS EN ISO 17829	6,1	+/-0.1
12	Length of pellets / fraction ≥ 50mm	%		100,0	+/-0.1
13	Length of pellets / fraction ≤ 40 mm	%		99,8	+/-0.1
14	Pellets fraction size distribution (Wet sieve test) < 4.0 mm < 3,15 mm < 2.0 mm < 1,0 mm < 0.25 mm	%	LVS EN ISO 17830	100,0 99,8 99,3 87,5 20,9	+/-0.1
15	Ash melting behaviour oxidising atmosphere (f) • Shrinkage starting temperature. SST -Deformation temperature. DT -Hemisphere temperature, HT -Flow temperature. FT	•c	LVS EN ISO 21404 /Fuse process phenomena	1100 1180 1210 1220	+/-10



LIGHT CRUDE OIL

SPECIFICATION	UNIT	MAX/MIN	VALUE
DENSITY AT 20 DEG C KG/M	%	MAX	0,870
SULFUR CONTENT	%	MAX	0,70
PARAFFIN CONTENT	%	MAX	1,8
WATER AND SEDIMENT	%	MAX	1,2
ASH CONTENT	%	MAX	0,05
CHLORIDE CONTENT	PPM	MAX	100
KINEMATIC VISCOSITY AT 20 °C	MM ² /S OR CST	-	7
KINEMATIC VISCOSITY AT 50 °C	MM ² /S OR CST	-	4
POUR POINT	°C	-	- 17
DESTILATION:			
UP TO 200 Degr. C.	%	MAX	21
UP TO 300 Degr. C.	%	MAX	41
UP TO 350 Degr. C.	%	MAX	50
INDEX API at 20C Degr	%	MAX	38,00
SALTS CONTENT, MG/L	PPM	MAX	100,00



LIGHT CRUDE OIL

SPECIFICATION	UNITS	RESULTS	TEST METHOD
Density at 15 °C	kg/L	0.8508	ASTM D 5002
Specific Gravity at 60/60°F	kg/L	0.8512	ASTM D 5002
API gravity	CST	34	ASTM D445
Kinematic viscosity at 20°C	CST	6.949	ASTM D445
Total acid Number	Mg KOH/g A	<0.050	ASTM D664
Pour Point	°C	<=36	ASTM D5853
Water by distillation	mass%	0.35	ASTM D4006
Sediment by extraction	mass%	0.01	ASTM D473
Chloride salt content	Mg/dm3	17	GOST 21534-75 (A)
Organic chlorine content	Mg.kg	1	ASTM D4929(B)
Sulphur content	Mass%	0.353	ASTM D4294
Hydrogen Sulphide	ppm	Less 1	UOP 163
Mercaptan Sulphur	ppm	111	UOP 163
Ash content	Mass%	0.011	ASTM D482
Nickel	ppm	4	IP 470
Sodium	ppm	1	IP 470
Iron	ppm	19	IP 470
Copper	ppm	Less 1	AAS
Vanadium	ppm	4	IP 470
Calcium	ppm	2	IP 470
Paraffin Wax content	Mass%	3.3	UOP 46
RVPE	kpa	40.4	ASTM D5191



**COMMERCIALLY
CONFIDENTIAL**

**DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9**

Asphaltenes(heptane) content	Mass%	0.2	IP 143
Distillation	—		ASTM D5236
Cut Range(°C)	Cum%vol		ASTM D5236
LPG	%vol	2.2	ASTM D5236
C5-65	%vol	6.1	ASTM D5236
65-100	%vol	9.8	ASTM D5236
100-150	%vol	16.7	ASTM D5236
150-200	%vol	25.1	ASTM D5236
200-250	%vol	32.7	ASTM D5236
250-300	%vol	42.0	ASTM D5236
300-350	%vol	50.9	ASTM D5236
350-370	%vol	54.2	ASTM D5236
370-475	%vol	70.0	ASTM D5236
475-515	%vol	74.6	ASTM D5236
515-525	%vol	76	ASTM D5236
525-553	%vol	79.9	ASTM D5236

**COMMERCIALLY
CONFIDENTIAL**

Gültepe Mah. Çimenli Sokak 24/33 Altındağ-Ankara
icanozer@cbis-group.net
www.cbis-group.net
23 / 28



**COMMERCIALLY
CONFIDENTIAL**

**DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9**

ZINC INGOT SPECIFICATION

S/N	Characteristics	Unit	Actual result
1	Zinc content (Zn)	%	$\geq 99,995$
2	Lead content (Pb)	%	$\leq 0,003$
3	Cadmium content (Cd)	%	$\leq 0,002$
4	Iron content (Fe)	%	$\leq 0,001$
5	Copper content (Cu)	%	$\leq 0,001$
6	Tin content (Sn)	%	$\leq 0,001$
7	Aluminum content (Al)	%	-
8	Arsenic content (As)	%	-
9	Antimony content (Sb)	%	-

**COMMERCIALLY
CONFIDENTIAL**



**COMMERCIALLY
CONFIDENTIAL**

**DOC NO : CBIS-KM-SP-21-0001
DATE : 13.02.2023
REV : 9**

FEED CORN SPECIFICATION

Moisture	Max 14%
Foreign Matter	Max 3%
Heat Damaged Kernel	Max 2%
Total Damaged Kernel	Max 5%
Discoloured / Immature	Max 3%
Broekn	Max 3%
Admixture	Max 2%
Packing	Bags / Bulk

**COMMERCIALLY
CONFIDENTIAL**

**Gültepe Mah. Çimenli Sokak 24/33 Altındağ-Ankara
icanozer@cbis-group.net
www.cbis-group.net
25 / 28**



FEED BARLEY SPECIFICATION

No	Analyses/tests	Limit	Reference methods (or equivalent)
1	Moisture	Max. 14.0 %	ISO 712
2	Protein	9.0-12.8%	ICC No 105
3	Organoleptic	Bright, clear appearance natural smell and color	Organoleptic examination
4	Test weight	Min. 65kg/hl	ISO 7971-1
5	Broken kernels	Max. 4.0%	1 Isual examination
6	Fire burnt	Nil	1 Isual examination
7	Frost	Max. 2.0%	1 'isual examination
8	Heated, rotted, severely mildewed	Max. 0.2%	1 'isual examination
9	Sprouted	Max. 0.5%	1 'isual examination
II	Excreta	Max. 0.01%	1 'isual examination
12	Inseparable seeds	Max. 0.2%	I Isual examination
13	Other cereal	Max. 2.0%	J 'isual examination
14	Sclerotinia	Max. 0.02%	1 Isual examination
15	Stone	Max. 0.02%	Usual examination
16	Total foreign material	Max. 2.0%	-
17	Live insect	NU	1 'isual examinanon



CRUDE SUN FLOWER OIL SPECIFICATION (TECHNICAL)

No	PARAMETERS	VALUE	TEST METHOD
1	ORGANIC PARAMETERS		
1.1	Appearance	pure	
1.2	Colour	golden	
1.3	Taste and odour	specific	
2	CHEMICAL PARAMETERS		
2.1	Colour index (Lovibond) - 5 %"	max 3.5 R/50 Y	BDS EN ISO 15305
2.2	Moisture and volatile matters	max 0.2 %	BDS EN ISO 662
2.3	Acidity as oleic acid	max 2.0 %	BDS EN ISO 660
2.4	Insoluble matters in ether	max 0.15 %	BDS EN ISO 663
2.5	Iodine value	110-143	BDS EN ISO 3961
2.6	Unsaponifiable matters	max 0.7 %	BDS EN ISO 3596
2.7	Flash point	>121 °C	BDS EN ISO 15267
2.8	Fatty acid content		
2.8.1	Palmitic acid - C16:0	% of the total fatty acid content	5.5-8.5
2.8.2	Stearic acid - C18:0		3 - 5.5
2.8.3	Oleic acid - C18:1		20-40
2.8.4	Linoleic acid - C18:2		40-70
2.8.5	Linolenic acid - C18:3		0.5 -1.5



CRUDE SUN FLOWER OIL SPECIFICATION (ESSENTIAL)

No	Parameter	Limit	Determining method
1	Free fatty acid (as oleinic) % (m/m)	Max.3,0	Volumetric
2	Unsoap matter % (m/m)	Max.1,5	Gravimetric
3	Water % (m/m)	Max.0,30	KF titration
4	Flash point (C)	Min. 225	Close cup
5	Total phosphor content %(m/m)	Max.0,025	Spectrofometric
6	Heavy-armature relay metal		
6.1	Copper content (Cu) (mg/kg)	Max. 0,4	ICP/MS
6.2	Plumbum content (Pb) (mg/kg)	Max. 0,1	ICP/MS
6.3	Arsenic content (As) (mg/kg)	Max. 0,4	ICP/MS
6.4	Iron content (Fe) (mg/kg)	Max. 5,0	ICP/MS
6.5	The content of polycyclic aromatic hydrocarbons (PAHs) (g/kg)	15 50	GC/MS
7	The content of C10 - C40		
7.1	The content of C10 - C40 (mg/kg)	1000	GC/MS
7.2	The content of dioxins is regulated by Product Standards GMP BA1.		
7.3	The content of dioxins (ng/kg)	0.5-0.75	GC/MS
7.4	The content of dioxin-like PCBs (ng/kg)	0.5	GC/MS
7.5	The content (sum) of dioxins and dioxin-like PCBs (ng/kg)	1.5	GC/MS