

PETROLEUM PRODUCTS LABORATORY - NAVODARI

NO. CRT.	TEST	STANDARD / METHOD
TECHNICAL UNIT - SPECIAL TESTS		
1	LEAD CONTENT - GASOLINE	EN 237:04, SR EN 237:05, ASTM D3237-2012
2	MANGANESE CONTENT - GASOLINE	EN 16135:2011; SR EN 16135:2012
3	FACTOR OF METALS (V, FE, CU, NI)	ASTM 5863-00a(2011)*
4	DETERMINATION OF GROSS CALORIFIC VALUE - COKE AND COAL	ISO 1928:09;ASTM D 5865-13*
5	CALCINATION TEST - METAL TESTS	ASTM 5863-00a(2011)*
6	CONTENT OF METALS - COKE (V, FE, NA, NI, CA, SI)	ASTM D 5056-15*
7	VANADIUM CONTENT	ASTM 5863-00a(2011)*
8	IRON CONTENT (ATOMIC ABSORPTION)	ASTM 5863-00a(2011)*
9	COPPER CONTENT	ASTM 5863-00a(2011)*
10	NICKEL COTENT	ASTM 5863-00a(2011)*
11	SODIUM CONTENT	ASTM 5863-00a(2011)*
12	ASH CONTENT	ISO 3987:2010*; SR ISO 3987:2010+C1:2013*; ASTM D874-2013a*
13	NAPHTHALENE	ASTM D 1840-07(2013)*
14	ASPHALTENES	ASTM D 6560-2012
15	SILICON FUEL OIL	SR ISO 10478-98*, ASTM D 5184-12*
16	LOWER CALORIFIC VALUE - LIQUIDS	ASTM D 240-14*
17	ALUMINUM FUEL OIL	SR ISO 10478-98*, ASTM D 5184-12*
18	PHOSPHORUS CONTENT - GASOLINE, BIODIESEL, Mg/Kg	ASTM D 3231-13*
19	ZINC	ASTM 3683-11*
20	DETERMINATION OF METALS GROUP I (NA + K) BIODIESEL, MG / KG	EN 14108:03*; SR EN 14108:03*; EN 14109:03*; SR EN 14109:03*

21	DETERMINATION OF METALS GROUP II (CA + MG) BIODIESEL, MG / KG	ASTM D 4628-14*
22	DETERMINATION OF COPPER - BIOETHANOL, MG/KG	SR EN 15488:08*
23	DETERMINATION OF PHOSPHORUS - BIOETHANOL, MG/KG	SR EN 15487:08*; EN 15487:07*
24	TEST FOR MICROBIOLOGY (BACTERIA TESTED)	
25	HOT FILTRATION TEST (HFT)	ASTM D 4870, ISO 10307-1/2009
26	DETERMINATION OF ALUMINUM, SILICON, VANADIUM, IRON, CALCIUM, ZINC AND SODIUM	IP 470/05
TECHNICAL UNIT - CHROMATOGRAPHY		
1	POLYCYCLIC AROMATIC HYDROCARBONS	SR EN 12916:06; EN 12916:06
2	CONTENT OF BENZENE	ASTM D 5443-2014*
3	CONTENT OF BENZENE	SR EN 12177:01*, SR EN 12177:2001/AC-02* si EN 12177-98*, ASTM D 3606-10*
4	PONA, AROMATIC, OLEFIN, PARAFFIN + NAPHTHENIC	ASTM D 5443-14*, SR EN ISO 22854:14(procedure A)
5	CONTENT OF OXYGEN	SR EN 1601:14*; SR EN 1601:2014/AC:2014*, SR EN 13132:01*, EN 13132:00*, DIN EN 13132-02*, SR EN ISO 22854-14*, ASTM D 4815-15b*
6	CONTENT OF OXYGENATE	SR EN 1601:14/AC:2014*; SR EN 1601:2014*; EN 1601:2014*, EN 1601:2014/AC:2014*; SR EN 13132:01*, EN 13132:00* si DIN EN 13132:02*, SR EN ISO 22854-14(procedure A), ASTM D4815-15b*
7	COMPOSITION (C2-C5 GAS)	SR EN 27941:00, SR 66:2007(pct.7.2) STAS 8722-70*, STAS 8723-70*, STAS 9756-79*, STAS 11114-88*
8	MOTOR OCTANE NUMBER (CALCULATION BASED COMPOSITION)	SR EN 589+A1:12, Annex B
9	CORROSIVENESS TO COPPER - COPPER STRIP TEST	SR EN ISO 6251-02, ASTM D 1838-14

10	EVAPORATION RESIDUE	SR EN 15471-08, SR EN ISO 13757-01* , EN ISO 13757-96*
11	VAPOR PRESSURE AT LIQUEFIED PETROLEUM GAS	SR EN ISO 8973-02 (pct.6.3.), SR EN 589+A1:12,
12	VAPOR PRESSURE AT AUTOMOTIVE FUELS - LPG	SR EN ISO 4256:02 , ASTM D 1267-2012
13	WATER CONTENT	SR EN 15469-08; SR 66:2007(pct.7.4)
14	ODOR	SR EN 589+A1:12 (pct. 6.3 Annex A)
15	DENSITY GAS (CALCULATION BASED COMPOSITION)	SR 66-07(pct. 7.3.), SR EN ISO 8973-02 (pct.6.2.)
16	COMPOSITION	SR EN 27941-00, STAS 8723-70*
17	DENSITY AT 15 ° C (CALCULATION BASED COMPOSITION)	SR 66-07(pct. 7.3.), SR EN ISO 8973-02 (pct.6.2.)
18	COMPOSITION	SR EN 27941-00, STAS 8722-70*
19	ODOR	ORGANOLEPTIC
20	LOW CALORIFIC VALUE	SR 66-07(pct. 7.2)
21	CALCULATIONS FOR DENSITY	SR 66-07(pct.7.3), SR EN ISO 8973-02(pct.6.2)
22	WATER CONTENT	SR 66-07 (pct. 7.4.)
23	COMPOSITION FOR NATURAL GAS AND GAS REFINERY - CHROMATOGRAPHY METHOD. DETERMINATION OF CALORIFIC VALUE	UOP 539-12 , SR EN ISO 6975:05+C91:2015, SR EN ISO 6976:05; SR EN ISO 6976:2005/C91:06,SR EN ISO 6976:2005/C92:09;SR EN ISO 6976:2005/C93:12
24	DETERMINATION OF DENSITY AND RELATIVE DENSITY OF NATURAL GASES AND FUELS	SR EN ISO 6976:05, SR EN ISO 6976:2005/C93:2012(pct.8)
25	DETERMINATION OF MTBE	ASTM 5441-98(2013)*
26	COMPOSITION (H2 PUR)	UOP 603-2013*
27	COMPOSITION (PENTANE)	Chromatographic method HP*
28	HUMIDITY AUTO LPG	ASTM D 2713-15, SR EN ISO 13758-03; EN ISO 13758:1996
29	DETERMINATION OF ESTER AND LINOLENIC ACID METHYL ESTER	SR EN 14103-11*

30	DETERMINATION OF FREE GLYCEROL , TOTAL GLYCEROL AND MONO-, DI- AND TRIGLYCERIDES	SR EN 14105-11*
31	METHANOL	SR EN 14110:2003
32	DETERMINATION OF MONO HIGHER SATURATED ALCOHOLS C3-C5 AND METHANOL - BIOETHANOL	EC/2870/2000-Method III.2 si SR EN 15721-2013(procedure A)
TECHNICAL UNIT - MANUFACTURED		
1	DENSITY (MANUAL)	ASTM D 1298-2012b*, SR EN ISO 3675-02*, SR EN ISO 3675-02/C91-05*, EN ISO 3675-98*, ISO 3675-98*
2	DENSITY (AUTOMATIC)	ASTM D 4052-15, SR EN ISO 12185-03, EN ISO 12185-2002, ISO 12185-96; ASTM D 5002-2016-titei
3	DISTILLATION	SR EN ISO 3405-11, EN ISO 3405-11, ISO 3405-11, ASTM D 86-15
4	FREEZING POINT (MANUAL)	ASTM 2386-2015*
5	FREEZING POINT (AUTOMATIC)	ASTM D 7154-15*, IP 528-08*
6	FREEZING POINT (AUTOMATIC)	ASTM D 7153-2015
7	TEMPERATURE FILTERABILITY LIMIT	SR EN 116:02, SR EN 116:02/AC:02, EN 116:97, ASTM D 6371-2005(2010)
8	CLOUD POINT	SR EN 23015-97, EN 23015-94, ISO 3015-92, ASTM D 2500-16
9	KINEMATIC VISCOSITY (LIQUID & TRANSPARENT PETROLEUM PRODUCTS)	ASTM D 445-15a, SR EN ISO 3104:02, SR EN ISO 3104:02/AC:02, EN ISO 3104:96, ISO 3104:94;
10	KINEMATIC VISCOSITY (OPAQUE PETROLEUM PRODUCTS)	ASTM 445-15a, SR EN ISO 3104-02; ASTM D 7042-14*
11	VAPOR PRESSURE (METHOD MINI)	ASTM D 5191-2015, SR EN 13016-1:08, EN 13016-1:07
12	VAPOR PRESSURE (TRIPLE EXTENSION)	ASTM D 6378-10*

13	INFLAMMATION, PENSKY-MARTENS	SR EN ISO 2719-03, EN ISO 2719-02, ISO 2719-02, ASTM D 93-15
14	TAG INFLAMMATION	ASTM D 56-05(10)
15	SMOKE POINT OF KEROSENE AND AVIATION TURBINE FUEL	ASTM 1322-2015ε1
16	CETANE NUMBER	ASTM D 613-2015αε1, SR EN ISO 5165-01, EN ISO 5165-98, ISO 5165-98
17	CALCULATION OF CETANE INDEX OF MIDDLE-DISTILLATE FUELS BY THE FOUR	ASTM D4737-10 (procedure A); SR EN ISO 4264:2008; SR EN ISO 4264:08/A1:2013; EN ISO 4264:2007; EN ISO 4264:2007/A1:2013; ISO 4264:2007; ISO 4264:07/A1:2013
18	RESEARCH OCTANE	ASTM D 2699-2015, SR EN ISO 5164:2014, EN ISO 5164:14, ISO 5164:2014
19	MOTOR OCTANE	ASTM D 2700-2014, SR EN ISO 5164:2013, EN ISO 5163:14, ISO 5163:2014
20	CORROSIVENESS TO COPPER - COPPER STRIP TEST (2 h at 100 °C)	SR EN ISO 2160-03, EN ISO 2160-98, ISO 2160-98, ASTM D 130-12
21	CORROSIVENESS TO COPPER - COPPER STRIP TEST (3 h at 50 °C)	SR EN ISO 2160-03, EN ISO 2160-98, ISO 2160-98, ASTM D 130-12
22	OXIDATION STABILITY (DIESEL)	ASTM D 525-2012a, SR EN ISO 7536-01, EN ISO 7536-96, ISO 7536-94
23	OXIDATION STABILITY AT 110 ° C (BIODIESEL)	SR EN 15751-2014, EN 15751-2014
24	THERMAL STABILITY (JFTOT-PETROLEUM)	SR EN 14112-03*, EN 14112-03*
25	NET FUEL HEAT	ASTM D 3241-2015ε2
26	SAYBOLT COLOUR	ASTM D 3338/D 3338M-09(2014)ε2
27	ENGLER VISCOSITY	ASTM D 156-2015
28	ASPECT	STAS 117-87
29	ASPECT (PETROLEUM DISTILLATES WITH FBP <400 ° C and color ASTM≤5)	Visual inspection
30	WATER AND SEDIMENT (IMPURITIES)	ASTM D 1796-11ε1, ASTM D 2709-96(11) e1, ASTM D 4007-11ε1 , SR ISO 9030-95

31	DISTILLED WATER FROM CRUDE OIL	ASTM D 1796-11ε1 , ASTM D 2709-96(11) e1, ASTM D 4007-11ε1 , SR ISO 9030-95
32	DISTILLED WATER FROM PETROLEUM PRODUCTS	ASTM D 4006-11(2012)ε1, SR EN ISO 9029-02
33	OXIDATION STABILITY (DIESEL)	ASTM D 95-13ε1
34	POUR POINT	ASTM D 97-15*
35	POUR POINT (OIL)	ASTM D 5853-11 (titei)
36	FREEZING POINT	STAS 39-80*
37	ANILINE POINT	ISO 2977:97*, ASTM D 611-12* (pct.A)
38	MARCUSSON INFLAMMATION	SR 5489-08*
39	INFLAMMATION CLEVELAND	ASTM D 92-12b*, SR EN ISO 2592:02*
40	VISCOSITY INDEX - CALCULATION BETWEEN VISCOSITY ON 40 DEGREES CELSIUS And Viscosity At 100 DEGREES CELSIUS	STAS 55-81*, ASTM 2270-10ε1*
41	COLOR	ASTM 1500-12*; SR ISO 2049-98*
42	VACUUM DISTILLATION	ASTM D 1160-15*
43	DISTILLATION OF CRUDE OIL	ASTM D 2892-15* si ASTM D 5236-13*
44	DISTILLATION OF HEAVY HYDROCARBON MIXTURES (POTENTIAL OF GOODS FOR OIL, PETROLEUM DISTILLATES, RESIDUE AND SYNTHETIC MIXTURES)	ASTM D 5236 -13*
TECHNICAL UNIT - ANALYTICAL		
1	TOTAL SULFUR - RX	ASTM 2622-16, SR EN ISO 20884:11; EN ISO 20884:2011; ISO 20884:2011; SR EN ISO 14596:2008; EN ISO 14596:2007; ISO 14596:2007
2	TOTAL SULFUR - UV	ASTM D 5453-16, SR EN ISO 20846:2012; EN ISO 20846:2011; ISO 20846:2011
3	WATER CONTENT, KARL-FISCHER	SR EN ISO 12937:01; SR EN ISO 12937:01/C91:2014; EN ISO 12937:2000; ISO 12937:2000; ASTM 1744:2013
4	ASH CONTENT	SR EN ISO 6245:03, EN ISO 6245:2002; ISO 6245:2001; ASTM 482-13

5	CONRADSON COKE	SR EN ISO 10370:2015; EN ISO 10370:2014; ISO 10370:2014; ASTM 4530-15
6	TOTAL CONTAMINATION (SEDIMENT) - DIESEL	SR EN 12662:2014; EN 12662:2014
7	OXIDATION STABILITY -DIESEL	SR EN ISO 12205-99; EN ISO 12205:1996; ISO 12205:1995
8	LUBRICANTS - DIESEL	ASTM D6079-11(16), SR EN ISO 12156/1-07; EN ISO 12156/1:2006; ISO 12156-1:2006
9	ELECTRIC CONDUCTIVITY	ASTM D2624-15, SR ISO 6297-02; ISO 6297:1997
10	ANALYSIS FIA (AROMATIC, OLEFIN)	ASTM 1319-15, SR EN 15553-07; EN 15553:2007
11	WATER CONTENT, KARL-FISCHER	SR ISO 760-94*
12	SULFUR MERCAPTAN IN THE LIQUID	ASTM D 3227-13
13	GUM-CURRENT GASOLINE /PETROL	ASTM 381-12; SR EN ISO 6246-00; EN ISO 6246:1997; ISO 6246:1995
14	HYDROGEN SULFIDE, MERCAPTAN - GASES, MERCAPTAN - LPG	UOP 212-77*, SR EN ISO 6326/3-99*
15	TOTAL SULPHUR-UV-LPG, GAS	ASTM D 6667-14
16	H2S-LPG	SR EN ISO 8819:2002*
17	EXISTING OIL GUMS	IP 540-08(2014)
18	TOTAL ACIDITY OIL	ASTM 3242-11
19	GUM POTENTIAL	STAS 314-70* , ASTM D873-12*
20	MOISTURE - PETROLEUM COKE	STAS 8160/6-70*, ASTM D 3173-11*
21	MOISTURE - OIL SULFUR	STAS 9098/1-80*
	LOSS OF MASS TO 80 DEGREES CELSIUS	ISO 3426
22	OIL SULFUR ASH	STAS 9098/1-80*
23	ASHES OF PETROLEUM COKE, COAL	SR 8160/9-97*, ISO 1171-11
24	ORGANIC SUBSTANCES IN OIL SULFUR	STAS 9098/1-80*
25	PURITY - SULFUR PETROLEUM	CALCUL*
26	ACIDITY - SULPHUR OIL (expressed as H2SO4)	STAS 11359/10-81*
27	APPEARANCE	VIZUAL*
28	SOLID FUEL. VOLATILES	STAS 5268-90*, ISO 562-10
29	(HARDGROVE GRINDABILITY INDEX) HGI	ASTM D 409/409M-12*

30	INORGANIC CHLORIDES FROM CRUDE OIL (CONDUCTOMETERS)	STAS 1166-89,pct.2*; ASTM 3230-13*
31	SEDIMENT BY EXTRACTION	ASTM 473-07(2012)*
32	ACID NUMBER	ASTM D 974-14e1*
33	ACIDITY AND ALKALINITY	ASTM 1093-11*
34	NUMBER OF BROM / BROMINE	ASTM D1159-07(2012)* / ASTM D2710 - 09(2013)*
35	ORGANIC CHLORINE CONTENT	ASTM 4929-15*
36	LOWER CALORIFIC VALUE (LIQUID) CALCULATION (SULPHUR DENSITY., CONTENT OF WATER AND ASHES)	ASTM D 4868-00(2010)
37	SODIUM HYDROXIDE CONCENTRATION CAUSTIC SODA	STAS 3068-80*
38	DOCTOR TEST	IP 30*
39	PARTICLE COUNTER (OIL)	IP 565-08*
40	TOTAL CONTAMINATION (OIL)	ASTM D 5452-12
41	MICROSEPAROMETRU (MSEP)	ASTM D 3948-14
42	TOTAL NITROGEN (CHEMILUMINESCENCE)	ASTM D 5762-12*, ASTM D 4629-12*
43	ACID VALUE BIODIESEL	SR EN 14104-03*
44	IODINE TO BIODIESEL	SR EN 14111-03*
45	WATER TO BIOETHANOL	SR EN 15489-08*
46	INORGANIC CHLORIDE TO BIOETHANOL	SR EN 15484-08*
47	TOTAL ACIDITY (EXPRESSED AS ACETIC ACID)	SR EN 15491-08*
48	NON-VOLATILE COMPOUNDS IN BIOETHANOL (DRY RESIDUE CONTENT)	SR EN 15691-09*
49	Sulphur, MG/KG	SR EN 15486-08*
50	ACID NUMBER DETERMINED BY TITRATION IN PETROLEUM PRODUCTS	ASTM D 664-11a*

* Non-Accredited Methods List