

# ROMANIAN ACCREDITATION ASSOCIATION - RENAR

Bucharest, Calea Vitan no. 242, sector 3, zip code 031301  
CIF RO 4311980



*RENAR is EA-MLA signatory for Testing.*

## ACCREDITATION CERTIFICATE No. LI 333

Romanian Accreditation Association – RENAR, being recognized as National Accreditation Body by OG 23/2009, herewith attests that the organization:

### **ROMPETROL QUALITY CONTROL SRL**

**Năvodari, No 215 Năvodari Avenue, Administrative Building, Room 220, 2nd Floor,  
Constanța county**

through

**ROMPETROL QUALITY CONTROL Laboratories: 1.LPP, 2.LM, 3.LPV, 4.LP**

fulfills the requirements of **SR EN ISO/CEI 17025:2005** and is competent to carry on **TESTING** activities, as it is detailed in the Annexes of the present accreditation certificate

This accreditation is maintained provided that the accreditation criteria established by the Romanian Accreditation Association – RENAR are met continuously.

The present certificate includes Annexes no. 1/22.03.2018 (5 pages), no. 2/22.03.2018 (4 pages), no. 3/22.03.2018 (1 pages), no. 4/22.03.2018 (1 page) and no. 5/22.03.2018 (2 pages), which are an integrated part of this certificate.

The accreditation certificate is an essential accreditation document, which might be periodically revised and issued by RENAR. The most recent version of the accreditation certificate is available on the website of RENAR, [www.renar.ro](http://www.renar.ro).

Date of initial accreditation: 31.01.2005

Date of renewal the accreditation: 17.02.2016

Updated on: 22.03.2018

The accreditation is valid until: 16.02.2020

**GENERAL DIRECTOR OF THE  
EXECUTIVE STRUCTURE**

**Alina Elena TAŢA**



**PRESIDENT OF THE  
ACCREDITATION COUNCIL**

**PhD. Eng. Dumitru DINU**

The translation of this certificate was issued today, 02.07.2018.

The Accreditation Certificate does not relieve/exempt CAB the obligation to obtain all permits and authorizations required for its operation under the law

Partial reproduction of this certificate is forbidden.

**ROMPETROL QUALITY CONTROL SRL**

through **Petroleum Products Laboratory - LPP**

**Năvodari, No. 215 Năvodari Avenue, Constanța county**

**Tests performed in permanent sites**

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>Petroleum products – Solid fuels</b>			
<b>Physical methods</b>			
1.	Determination of density. Test method for density by digital density meter	Liquid petroleum products	RQC.LPP-PS.01 point 7.1 ASTM D 4052-16 ASTM D 5002-16 SR EN ISO12185:2003 ISO 12185:1996 EN ISO12185:1996
2.	Determination of distillation characteristics. Automatic method	Liquid petroleum products	RQC.LPP-PS.02 point 7 SR EN ISO 3405:2011 EN ISO 3405:2011 ISO 3405:2011 ASTM D 86-17
3.	Determination of the freezing point (Automatic method)	Aviation fuels	RQC.LPP-PS.04 point 7.1 ASTM D 7153-15ε1
4.	Determination of cold filter plugging point	Fuels for Diesel engines	RQC.LPP-PS.04 point 7.2 SR EN 116:2016 EN 116:2015 ASTM D 6371-2016
5.	Determination of cloud point	Petroleum products	RQC.LPP-PS.04 point 7.3 ASTM D 2500-17 SR EN 23015:1997 EN 23015:1994 ISO 3015:1992
6.	Determination of lubricity	Diesel fuel	RQC.LPP-PS.05 point 7.3 SR EN ISO 12156-1:2016 EN ISO 12156-1:2016 ISO 12156-1:2016 ASTM D 6079-11(2016)
7.	Determination of kinematic viscosity	Transparent liquid petroleum products	RQC.LPP-PS.06 point 7 ASTM D 445-17a SR EN ISO 3104:2002 SR EN ISO 3104:02/AC:2002 EN ISO 3104:1996 ISO 3104:1994
8.	Estimation of net heat of combustion of aviation fuels	Aviation fuels	RQC.LPP-PS.12 point 7.2 ASTM D 3338/D 3338M-09(2014)ε2
9.	Determination of vapour pressure	Liquid petroleum products	RQC.LPP-PS.08 point 7.1 ASTM D 5191-15 SR EN 13016-1:2008 EN 13016-1:2007
		Automotive fuels - LPG	RQC.LPP-PS.08 point 7.3 SR EN ISO 4256:2002 ASTM D 1267-12
10.	Calculation method for density	LPG	RQC.LPP-PS.01 point 7.2



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
			SR 66:2007, point 7.3 SR EN ISO 8973:2002, point 6.2.
11.	Determination of vapour pressure for liquefied petroleum gases	LPG	RQC.LPP-PS.08 point 7.2 SR EN ISO 8973:2002, point 6.3 SR EN 589+A1:2012
12.	Calculation of density and relative density of natural gases and combustible gaseous fuels	Natural gas Combustible gaseous fuels	RQC.LPP-PS.01 point 7.3 SR EN ISO 6976:2005, point 8 SR EN ISO 6976:2005/C91:2006 SR EN ISO 6976:2005/C92:2009 SR EN ISO 6976:2005/C93:2012
13.	Determination of flash point by Pensky-Martens closed cup test	Liquid petroleum products	RQC.LPP-PS.13 point 7.1 SR EN ISO 2719:2016 EN ISO 2719:2016 ISO 2719:2016 ASTM D 93-16a
14.	Determination of flash point by TAG closed cup tester	Liquid petroleum products	RQC.LPP-PS.13 point 7.2 ASTM D 56-2016a
15.	Determination of the maximum height of the flame without smoke generation	Aviation fuels	RQC.LPP-PS.15 point 7 ASTM D 1322-15e1
16.	Determination of the cetane number	Diesel fuels	RQC.LPP-PS.19 point 7.1 ASTM D 613-17b SR EN ISO 5165:2001 EN ISO 5165:1998 ISO 5165:1998
17.	Calculation of cetane index of middle-distillate fuels by four-variable equation	Diesel fuels	RQC.LPP-PS.19 point 7.2 ASTM D 4737-10(2016), Method 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.	Determination of automotive fuel dryness by valve freeze method (valve freeze)	Automotive fuels - LPG	RQC.LPP-PS.23 point 7.1 SR EN ISO 13758:2003 EN ISO 13758:1996 ASTM D 2713-15
19.	Determination of knock characteristics of motor fuels Standard method for determining the octane number of spark-ignition engines Research method	Automotive motor fuels	RQC.LPP-PS.28 point 7.1 ASTM D 2699-2016 e1 ISO 5164:2014 EN ISO 5164:2014 SR EN ISO 5164:2014
20.	Determination of knock characteristics of motor and aviation fuels Standard method for determining the octane number of spark-ignition engines Motor method	Motor and aviation fuels	RQC.LPP-PS.28 point 7.2 ASTM D 2700:2016 a ISO 5163:2014 EN ISO 5163:2014 SR EN ISO 5163:2014
21.	Determination of knock characteristics Engine octane number	Automotive fuels - LPG	RQC.LPP-PS.28 point 7.3 SR EN 589+A1:2012, Annex B
22.	Determination of electrical conductivity	Aviation fuels and distillate fuels	RQC.LPP-PS.22 point 7 ASTM D 2624-15 SR ISO 6297:2002 ISO 6297:1997
23.	Determination of oxidation stability (induction period method)	Gasoline	RQC.LPP-PS.09 point 7.1 ASTM D 525-12a





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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
			SR EN ISO 7536:2001 EN ISO 7536:1996 ISO 7536:1994
24.	Determination of the oxidation stability	Middle-distillate fuels	RQC.LPP-PS.09 point 7.2 SR EN ISO 12205:1999 EN ISO 12205:1996 ISO 12205:1995
25.	Determination of thermal oxidation stability (JFTOT procedure)	Aviation fuels	RQC.LPP-PS.09 point 7.4 ASTM D 3241-2016a
26.	Determination of oxidation stability (accelerated oxidation method)	Diesel fuel	RQC.LPP-PS.09 point 7.5 SR EN 15751:2014 EN 15751:2014
27.	Determination of hydrocarbon types Fluorescent indicator adsorption method	Liquid petroleum products and related materials	RQC.LPP-PS.14 point 7 ASTM D 1319-15 SR EN 15553:2007 EN 15553:2007
28.	Determination of water separation characteristics of aviation fuels by portable separator	Aviation fuels	RQC.LPP-PS.27 point 7.4 ASTM D 3948:14
<b>Physico-chemical methods</b>			
29.	Determination of corrosiveness to copper by copper strip test	Liquid petroleum products	RQC.LPP-PS.05 point 7.1 SR EN ISO 2160:2003 EN ISO 2160:1998 ISO 2160:1998 ASTM D 130-12
		Automotive fuels - LPG	RQC.LPP-PS.05 point 7.2 SR EN ISO 6251:2002 ASTM D 1838-16
30.	Determination of gum content	(Motor gasoline; other volatile distillates) Light and middle distillates	RQC.LPP-PS.09 point 7.3 SR EN ISO 6246:2000 EN ISO 6246:2017 ISO 6246:2017 ASTM D 381-12
31.	Determination of existent gum content of the aviation fuel	Aviation fuels	RQC.LPP-PS.09 point 7.6 IP 540/08(2014)
32.	Estimation of net and gross heat of combustion of liquid fuels and Diesel fuels	Diesel and liquid fuels	RQC.LPP-PS.12 point 7.1 ASTM D 4868-2017
33.	Determination of gross calorific value of solid mineral fuels by the bomb calorimetric method and calculation of net calorific value	Solid mineral fuels	RQC.LPP-PS.12 point 7.3 ISO 1928:2009 SR 5264:1995 SR 5264:1995/C91:2016 ISO 562:2010 ISO 1171:2010
<b>Gravimetric methods</b>			
34.	Determination of ash content of petroleum products	Petroleum products	RQC.LPP-PS.03 point 7.1 SR EN ISO 6245:2003 EN ISO 6245:2002 ISO 6245:2001 ASTM D 482-13
35.	Determination of carbon residue Micro method.	Liquid petroleum products	RQC.LPP-PS.03 point 7.2 SR EN ISO 10370:2015 EN ISO 10370:2014 ISO 10370:2014 ASTM D 4530-15



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
36.	Determination of total contamination in middle distillates	Middle distillates Diesel fuel	RQC.LPP-PS.27 point 7.2 EN 12662:2014 SR EN 12662:2014
37.	Determination of particulate contamination in aviation fuels by laboratory filtration	Aviation fuels	RQC.LPP-PS.27 point 7.3 ASTM D 5452-12
38.	Determination of dissolved residues by high-temperature gravimetric method	Automotive fuels - LPG	RQC.LPP-PS.23 point 7.2. SR EN 15471:2008
39.	Determination of asphaltenes	Crude petroleum Petroleum products	RQC.LPP-PS.03 point 7.3 ASTM D 6560-12
<b>Cromatographic methods</b>			
<b>Gas cromatography</b>			
40.	Determination of natural/combustible gases composition/ by gas-chromatographic method Calculation of calorific value	Natural gases Combustible gases	RQC.LPP-PS.11 point 7.1 SR EN ISO 6975:2005 SR EN ISO 6975:2005/C91:2015 UOP 539-2012 RQC.LPP-PS.11 point 7.2 SR EN ISO 6976:05 SR EN ISO 6976:05/C91:06 SR EN ISO 6976:05/C92:09 SR EN ISO 6976:2005/C93:2012
41.	Determination of paraffin, olefins, naphthenic, aromatic hydrocarbons, benzene and oxygenates content by gas-chromatographic method	Automotive motor gasoline	RQC.LPP-PS.24 point 7 SR EN ISO 22854:2016 (procedure A)
42.	Chromatographic determination of light gas fractions and liquefied gases. Calculation of net calorific value of LPG	Gases and liquefied petroleum gases (LPG)	RQC.LPP-PS.31 point 7.1 SR EN 27941:2000 RQC.LPP-PS.31 point 7.2 SR 66:2007, point 7.2.
<b>High performance liquid chromatography, HPLC</b>			
43.	Determination of polycyclic aromatic hydrocarbon in middle distillates.	Middle distillates	RQC.LPP-PS.32 point 7.1 EN 12916:2016 SR EN 12916:2016
44.	Determination of aromatic hydrocarbon content in middle distillates and Jet A1 fuels	Middle distillates and Jet A1 fuels	RQC.LPP-PS.32 point 7.2 ASTM D 6379-11
<b>Spectrometric methods</b>			
<b>Wavelength-dispersive X-ray fluorescence spectrometry</b>			
45.	Determination of sulphur content. Wavelength-dispersive X-ray fluorescence spectrometry method	Liquid petroleum products Liquid automotive fuels	RQC.LPP-PS.07 point 7.2 ASTM D 2622-2016 SR EN ISO 20884:2011 EN ISO 20884:2011 ISO 20884:2011 SR EN ISO 14596:2008 EN ISO 14596:2007 ISO 14596:2007
<b>Flame atomic absorption spectrometry (FAAS)</b>			
46.	Determination of content of lead	Gasoline	RQC.LPP-PS.10 point 7 SR EN 237:2005 EN 237:2004 ASTM D 3237-17
47.	Determination of manganese content	Unleaded petrol	RQC.LPP-PS.18 point 7 SR EN 16135:2012 EN 16135:2011



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
48.	Determination of the sulfur content Ultraviolet fluorescence method	Liquid petroleum products	RQC.LPP-PS.07 point 7.3 ASTM D 5453-2016 ε1 SR EN ISO 20846:2012 EN ISO 20846:2011 ISO 20846:2011
49.	Determination of total sulphur by ultraviolet fluorescence	Gaseous hydrocarbons and liquefied petroleum gases	RQC.LPP-PS.07 point 7.4 ASTM D 6667-14
<b>Volumetric methods</b>			
50.	Determination of the acidity	Aviation fuels	RQC.LPP-PS.27 point 7.5 ASTM D 3242-11(2017)
<b>Potentiometric titration</b>			
51.	Determination of hydrogen sulphide and mercaptan sulphur	Engines fuels	RQC.LPP-PS.07 point 7.1 ASTM D 3227-2016
<b>Coulometric methods</b>			
52.	Determination of water by coulometric Karl Fischer titration method Determination of water in liquid petroleum products by KF reagent	Petroleum products	RQC.LPP-PS.27 point 7.1 SR EN ISO 12937:2001 SR EN ISO 12937:2001/C91:2014 EN ISO 12937:2000 ISO 12937:2000 ASTM 1744:13
<b>Colorimetric methods</b>			
53.	Determination of the SAYBOLT color	Petroleum products	RQC.LPP-PS.29 point 7 ASTM D 156-15
<b>Qualitative methods</b>			
54.	Sampling from retail site pumps and commercial site fuel dispensers	Automotive fuels	RQC.LPP-PS.40 point 7 SR EN 14275:2013

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**GENERAL DIRECTOR OF THE EXECUTIVE STRUCTURE**  
**Alina Elena TAINĂ**





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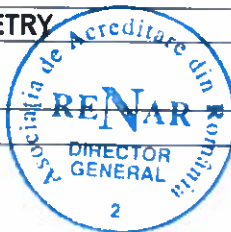
**ROMPETROL QUALITY CONTROL SRL**

through **Environment Laboratory – LM**

**Năvodari, No. 215 Năvodari Avenue, Constanța county**

**A. Tests performed in permanent sites**

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>ENVIRONMENT</b>			
<b>ELECTROCHEMICAL METHODS</b>			
1.	Determination of electrical conductivity	Surface water Ground water Waste water	SR EN 27888:1997 RQC.LM-PS.35
2.	Determination of pH	Surface water Ground water Waste water	SR EN ISO 10523:2012 RQC.LM-PS.34
		Soil	SR ISO 10390:2015 RQC.LM-PS.34
<b>GRAVIMETRIC METHODS</b>			
3.	Determination of suspension powders concentrations	Air	STAS 10813-76 RQC.LM-PS.03
4.	Determination of sedimentable powders	Air (Imissions)	STAS 10195-75 RQC.LM-PS.27
5.	Determination of organic solvents extractable substances	Surface water Waste water	SR 7587:1996 RQC.LM-PS.36
6.	Determination of suspended matters content	Surface water Waste water	STAS 6953-81 RQC.LM-PS.38
7.	Determination of the residue	Surface water Ground water Waste water	STAS 9187-84 RQC.LM-PS.39
<b>VOLUMETRIC METHODS</b>			
8.	Determination of sulphides content	Surface water Waste water	SR 7510:1997 RQC.LM-PS.41
9.	Determination of chlorides content	Surface water Ground water	SR ISO 9297:2001 RQC.LM-PS.42
		Surface water Ground water Waste water	HACH 8206 – Internal validated method RQC.LM-PS.42, ed. 4/rev. 0, point 7.2
10.	Determination of ammonium content	Surface water Waste water	SR ISO 5664:2001 RQC.LM-PS.44
11.	Determination of the chemical oxygen demand	Surface water Ground water Waste water	SR ISO 6060:1996 RQC.LM-PS.45
12.	Determination of biochemical oxygen demand after n days (BODn)	Surface water Ground water Waste water	SR EN 1899-1:2003 SR EN 25813:2000 (iodometric OD) SR EN 25813:2000/C91:2009 RQC.LM-PS.46
<b>SPECTROPHOTOMETRIC METHODS</b>			
<b>MOLECULAR ABSORPTION SPECTROPHOTOMETRY</b>			
13.	Determination of hydrogen sulphide	Air	STAS 10814- 76 RQC.LM-PS.14
14.	Determination of ammonia concentration	Air	STAS 10812-76



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
			RQC.LM-PS.17
15.	Determination of mercaptans concentration	Air	STAS 12730-89 RQC.LM-PS.18
16.	Determination of aliphatic hydrocarbons concentration	Air (Workplace atmospheres)	Toxicological test methods – 1991 RQC.LM-PS.20, ed. 5/rev. 0
17.	Determination of the mass concentration of sulfur dioxide	Air (Imissions)	SR ISO 6767:2000 RQC.LM-PS.24
18.	Determination of phenol index	Surface water Ground water Waste water	SR ISO 6439:2001 SR ISO 6439:2001/C91-2006 RQC.LM-PS.48 HACH 8047- Internal validated method RQC.LM-PS.48, ed. 3/rev. 1, point 7.1
19.	Determination of phosphorus (orthophosphates and total phosphorus)	Surface water Sea water Waste water	HACH 8190 (total phosphorus) – Internal validated method RQC.LM-PS.53, ed. 3/rev. 1, point 7.1
		Surface water Sea water	HACH 8178 (orthophosphates) - Internal validated method RQC.LM-PS.53, ed. 3/rev. 1, point 7.2
		Surface water Ground water Waste water Sea water	SR EN ISO 6878:2005 RQC.LM-PS.53
20.	Determination of anionic surfactants by measurement of the methylene blue index MBAS	Surface water Ground water Waste water	SR EN 903:2003 RQC.LM-PS.144
21.	Determination of sulphates	Surface water Ground water Waste water	HACH 8051- Internal validated method RQC.LM-PS.58, ed. 3/rev. 1
22.	Determination of nitrites content	Surface water Ground water Waste water	SR EN 26777:2002 SR EN 26777:2002/C91:2006 RQC.LM-PS.63
23.	Determination of nitrates content	Surface water Ground water Waste water	HACH 8039 - Internal validated method RQC.LM-PS.64, ed. 3/rev. 1
24.	Determination of sulphides content	Waste water Sea water	HACH 8131- Internal validated method RQC.LM-PS.41 ed. 4/rev. 1, point 7.2
25.	Determination of ammonium content	Surface water Ground water Waste water	SR ISO 7150-1/2001 RQC.LM-PS.44
26.	Determination of water bound nitrogen (TN <sub>b</sub> ) – chemiluminescence method	Surface water Waste water Domestic water	SR EN 12260:2004 RQC.LM-PS.62
27.	Determination of total organic carbon (TOC) and dissolved organic carbon (DOC) by combustion method	Surface water Ground water Waste water	SR EN 1484:2001 RQC.LM-PS.72
<b>INFRARED SPECTROPHOTOMETRY METHODS</b>			
28.	Liquid petroleum products	Diesel	SR EN 14078:2014 RQC.LM-PS.150





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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
	Determination of fatty acid methyl ester (FAME) content in middle distillates		
29.	Determination of petroleum products content in water	Surface water Waste water	SR 7877-2:1995 RQC.LM-PS.109
<b>ATOMIC ABSORPTION SPECTROPHOTOMETRY METHODS</b>			
30.	<b>Determination of metals by flame atomic absorption</b>		
	Content of: cobalt, nickel, copper, zinc, cadmium and lead	Surface water Ground water Waste water	SR ISO 8288:2001 RQC.LM-PS.69
	Content of aluminium	Surface water Ground water Waste water	SR EN ISO 12020:2004 RQC.LM-PS.65
	Content of manganese	Surface water Ground water Waste water	SR 8662-2:1996 RQC.LM-PS.66
	Content of iron	Surface water Ground water Waste water	SR 13315:1996 SR 13315:1996/C91:2008 RQC.LM-PS.67
	Content of chromium	Surface water Ground water Waste water	SR EN 1233:2003 chapter 3 RQC.LM-PS.68 Method A
	Content of: cadmium, chromium, cobalt, copper, lead, manganese, nickel and zinc	Soil	SR ISO 11047:1999 RQC.LM-PS.88
31.	<b>Determination of metals by atomic absorption spectrometry with graphite furnace</b>		
	Content of: cadmium, copper, manganese, nickel, lead, chromium	Surface water Ground water Waste water	SR EN ISO 15586:2004 RQC.LM-PS.70 SR EN 1233:2003 chapter 4 RQC.LM-PS.68 Method B

**B. Tests performed in mobile laboratory**

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>SPECTROPHOTOMETRIC METHODS</b>			
32.	Determination of the concentration of nitrogen dioxide and nitrogen monoxide present in ambient air by mobile laboratory	Ambient air (Imissions)	SR EN 14211:2012 RQC.LM-PS.10
33.	Determination of the concentration of carbon monoxide present in ambient air by mobile laboratory - nondispersive infrared spectroscopy method (NDIR)	Ambient air (Imissions)	SR EN 14626:2012 RQC.LM-PS.26
34.	Determination of the concentration of sulphur dioxide present in ambient air by mobile laboratory - ultraviolet fluorescence method	Ambient air (Imissions)	SR EN 14212:2012/AC:2014 RQC.LM-PS.25

**C. Tests performed in situ**

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>ELECTROCHEMICAL METHODS</b>			
35.	Determination of concentrations of chemical pollutants in the workplace	Air (Workplace atmospheres)	SR EN 45544-1:2015 RQC.LM-PS.01



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
	atmosphere using portable sampling devices by pumping (H <sub>2</sub> S, SO <sub>2</sub> , CO, CO <sub>2</sub> , NO <sub>2</sub> , COV, NH <sub>3</sub> )		
36.	Determination of the chemical pollutants concentration in ambient air by diffusive samplers (SO <sub>2</sub> ; CO; CO <sub>2</sub> ; COV)	Ambient air (Imissions)	SR EN 13528-1:2003 RQC.LM-PS.02
37.	Determination of concentrations of explosive mixtures and oxygen in the air for fire and non-fire intervention with the portable apparatus method	Air – potentially explosive atmospheres	SR EN 1127-1:2011 SR EN 50104:2011 RQC.LM-PS.05
<b>PHYSICAL METHODS</b>			
38.	Determination of the environment microclimate and in the workplace atmosphere (temperature, relative humidity, air currents speed, pressure) - method with portable device	Air (workplace atmospheres and imissions)	SR ISO 8756:1996 RQC.LM-PS.06
39.	Determination of lighting in buildings and outer spaces - portable device method	Lighting level (workplaces)	STAS 8313- 92 RQC.LM-PS.07
40.	Determination of noise level - portable device method	Acoustic field / Noise level in workplaces	STAS 7150-77 RQC.LM-PS.08
		Acoustic field / Environmental noise level	SR ISO 1996-1:2016 RQC.LM-PS.28
41.	Determination of total and respirable particulates concentrations (PM 10, PM 2.5, PM 1)	Air (workplaces atmosphere and imissions)	NIOSH 0500,NIOSH 0600 RQC.LM-PS.03. ed. 5/rev. 0, point 7.2, point 7.3
<b>AUTOMATED METHODS (PHOTOIONIZATION/FLAME IONIZATION DETECTION)</b>			
42.	Determination of fugitive emissions of volatile organic compounds (VOC)	Fugitive/diffuse emissions	SR EN 15446/2009 RQC.LM-PS.29

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**Alina Elena TAINĂ**



**ROMPETROL QUALITY CONTROL SRL**

through **Petroleum Products Laboratory Vega - LPV**

**Ploiești, No 146 Văleni Street, Prahova county**

**Tests performed in permanent sites**

No.	Activity area / Measurement technique / Name of the test	Material / product / object test	Reference document
<b>Petroleum products</b>			
<b>Physical methods</b>			
1.	Determination of density liquid petroleum products Hydrometer method	Liquid petroleum products	SR EN ISO 3675:2002 / C91:2005 ASTM D 1298-12b(17) RQC.LPV-PS.01 point 7.1
2.	Determination of density of liquid petroleum products. Oscillating U-tube method (digital density meter)	Transparent liquid petroleum products	SR EN ISO 12185-03 ASTM D 4052-16 RQC.LPV-PS.01 point 7.2
3.	Determination of distillation characteristics of liquid petroleum products, at atmospheric pressure Manual method	Liquid petroleum products	SR EN ISO 3405-11 ASTM D 86-17 RQC.LPV-PS.02 point 7.1
4.	Determination of distillation characteristics of liquid petroleum products, at atmospheric pressure Automated method	Liquid petroleum products	SR EN ISO 3405-11 ASTM D 86-17 RQC.LPV-PS.02 point 7.2
5.	Determination of flash point of liquid petroleum products Pensky-Martens closed cup method	Liquid petroleum products: liquid fuels, petroleum	SR EN ISO 2719-2016 ASTM D 93-16a RQC.LPV-PS.03 point 7.1
6.	Determination of flash point of liquid petroleum products Abel closed-cup method	Liquid petroleum products: solvents, petroleum	SR EN ISO 13736-13 RQC.LPV-PS.03 point 7.2
7.	Determination of the softening point Ring and Ball method	Vacuum distillation residues, bitumen and bituminous binders	SR EN 1427-15 ASTM D36/D36M-14e1 RQC.LPV-PS.07
8.	Determination of needle penetration	Vacuum distillation residues, bitumen and bituminous binders	SR EN 1426-15 ASTM D5/D5M-13 RQC.LPV-PS.08
<b>Volumetric methods</b>			
9.	Determination of water –content in liquid petroleum products (Karl Fischer method)	Liquid petroleum products	SR ISO 760-94 RQC.LPV-PS.04 pct.7.1 SR EN ISO 12937-01/C91:2014 ASTM D 6304-16e1 RQC.LPV-PS.04 point 7.2
<b>Spectrometric methods/ Ultraviolet (UV) fluorescence spectrometry</b>			
10.	Determination of sulphur content in liquid petroleum products by ultraviolet fluorescence	Liquid petroleum products having a sulphur content <1000mg/kg	ASTM D 5453-16e1 RQC.LPV-PS.09

*End of document*

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**Alina Elena TAINA**





**Annex no. 4 to Accreditation Certificate no. LI 333  
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**ROMPETROL QUALITY CONTROL SRL**

through **Environment Laboratory - LM**

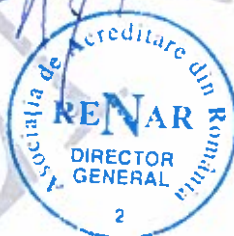
**Năvodari, No. 215 Năvodari Avenue, Constanța county**

For this scope, the laboratory demonstrated that also fulfills the additional requirements set up in SR CEN/TS 15675:2009.

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>Air quality - Stationary source emissions</b>			
1.	Determination of the mass concentration of total gaseous organic carbon (TOC) - flame ionisation detector method	Residual gaseous effluents (emissions)	SR EN 15259/2009 SR EN 12619:2013 RQC.LM-PS. 09, point 7.3
2.	Determination of atmospheric pollutants emissions from stationary sources: composition of combustion gases (oxygen, carbon dioxide, carbon monoxide, nitrogen oxides, sulphur dioxide)	Residual gaseous effluents (emissions)	SR EN 15259:2009 SR ISO 10396/2008; MWFEP Order 462:1993 RQC.LM-PS.09, point 7.1
3.	Determination of atmospheric pollutants emissions from stationary sources: composition of gases: total particulate matter	Residual gaseous effluents (emissions)	SR EN 15259:2009 SR EN 13284-1/2002+C91/2010 SR ISO 9096/2005 RQC.LM-PS.09, point 7.2

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**GENERAL DIRECTOR OF THE EXECUTIVE STRUCTURE  
Alina Elena TAINĂ**



**Annex no. 5 to Accreditation Certificate no. LI 333**  
**Annex no. 5 Issue Date: 22.03.2018**

**ROMPETROL QUALITY CONTROL SRL**

through **Petrochemicals Laboratory - LP**

**Năvodari, No. 215 Năvodari Avenue, Constanța county**

**Tests performed in permanent sites**

No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
<b>Thermoplastic materials and raw materials</b>			
<b>Gravimetric methods</b>			
1.	Determination of ash content in plastics	Polyolefins (PP/PE)	ASTM D 5630-13 RQC.LP – PS.14
<b>Physical methods</b>			
2.	Determination of density Density gradient column method	Thermoplastic materials (PE/PP) and processed thermoplastics	ASTM D 1505-10 SR EN ISO 1183-2:2005 ASTM D2839-2016 RQC.LP – PS.01
3.	Determination of the density Immersion method	Thermoplastic materials (PE/PP) and processed thermoplastics	SR EN ISO 1183-1:2013 ASTM D 792-13 RQC.LP – PS.02
4.	Determination of Vicat softening temperature (VST) / heat deflection temperature under load (HDT)	Thermoplastic materials (PE/PP) and processed thermoplastics	SR EN ISO 75-1:2013 SR EN ISO 75-2:2013 SR EN ISO 306:2014 ASTM D 648-2016 ASTM D 1525-09 RQC.LP – PS.11
5.	Determination of haze	Sheets/films of thermoplastic materials	ASTM D 1003-13 RQC.LP – PS.09
6.	Determination of gloss	Sheets/films of thermoplastic materials	ASTM D 2457-13 RQC.LP – PS.10
7.	Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR)	Thermoplastic materials (PE/PP) and processed thermoplastics	SR EN ISO 1133:2012 ASTM D 1238-13 RQC.LP – PS.03
<b>Chromatographic methods</b>			
8.	Determination of natural/combustible gas composition and physical properties calculation	Natural gas/ combustible gases	SR EN ISO 6975:2005 SR EN ISO 6975:2005/C91:2015 SR EN ISO 6976:05 SR EN ISO 6976:05/C91:06 SR EN ISO 6976:05/C92:09 SR EN ISO 6976:2005/C93:2012 UOP-539:1997 RQC.LP – PS.17/ed. 1/rev. 1
9.	Determination of hydrocarbon content in ethylene and propylene	Combustible gases Ethylene/Propylene	ASTM D 6159-2017) ASTM D 2712-91(2016) ASTM D2163-14 RQC.LP – PS.15
10.	Determination of impurificators in ethylene and propylene	Ethylene/Propylene	WASSON 462B:00 RQC.LP – PS.16
<b>Spectrophotometric methods – Inductively coupled plasma mass spectrometry</b>			
11.	Determination of trace elements Pb, Ni, Cr, Cu, Zn, As, Cd, Co, Mn, V and Hg in petroleum products and petrochemicals using ICP-MS method	Petroleum products and petrochemicals	IP 592/11 RQC.LP-PS.18 ed. 1/rev. 0



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No.	Activity area / Measurement technique / Name of the test	Material / product / test object	Reference document
	Determination of trace elements Pb, Cd, Cr and Hg in thermoplastic materials using ICP-MS method	Thermoplastic materials	Agilent 5989-6273EN:2009-RQC.LP-PS.18 ed. 1/rev. 0
<b>Physico-mechanical methods</b>			
12.	Determination of Charpy/Izod impact properties	Thermoplastic materials (PE/PP) and processed thermoplastics	SR EN ISO 179-1:2010 SR EN ISO 180:2001 SR EN ISO 180:2001/A2:2013 ASTM D 256-10 ASTM D 4812-11 ASTM D 6110-10 RQC.LP – PS.06
13.	Determination: of tensile properties of thermoplastic materials; of modulus of traction; shets/ films traction properties	Thermoplastic materials (PE/PP) and processed thermoplastics/ sheets / films of thermoplastic materials	ASTM D 638-14 ASTM D 882-12 SR EN ISO 527-1:2012 SR EN ISO 527-2:2012 SR EN ISO 527-3:2000 SR EN ISO 527-4:2000 RQC.LP – PS.04
14.	Determination: of flexural properties of plastics, of flexural modulus	Thermoplastic materials (PE/PP) and processed thermoplastics	SR EN ISO 178:2011 SR EN ISO 178:2011/A1:2013 ASTM D 790-15 RQC.LP – PS.05
15.	Determination of tear resistance of sheets/films	Sheets/films of thermoplastic materials	ASTM D 1004-13 STAS 6127-87 RQC.LP – PS.07

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