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National Accreditation Bureau
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1 (6)

Accredited to LST EN ISO/IEC 17025:2018

**QUALITY CONTROL CENTER
OF PUBLIC COMPANY „ORLEN LIETUVA”**

Mazeikiai str. 75, Juodeikiai, LT-89453 Mazeikiai region, Lithuania

SCOPE OF ACCREDITATION
Flexible*

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods	Techniques, methods and/or equipment used (where appropriate)
TESTS OF PETROLEUM PRODUCTS*			
Motor fuels. Gasoline	Volatility index	LST EN 228	Calculation method
	Lead content	LST EN 237 (basic procedure)	AAS method
	Copper strip test (3 h at 50°C)	LST EN ISO 2160	Qualitative method
	Manual sampling	LST EN ISO 3170	Sampling method (manual)
	Distillation	LST EN ISO 3405 (automated equipment)	Distillation
		ASTM D 86 (automated method)	Distillation
	Motor Octane Number (MON)	LST EN ISO 5163	Motor method
	Research Octane Number (RON)	LST EN ISO 5164	Motor method
	Existent gum content (solvent washed)	LST EN ISO 6246	Steaming out, weighing
	Oxidation stability	LST EN ISO 7536	Oxidation
	Density at 15°C	LST EN ISO 12185	Oscillation-type densimetry (Oscillating U-tube method)
	Vapour pressure (DVPE)	LST EN 13016-1	Steam-out
	Sulphur content	LST EN ISO 20846	UV fluorescence
	Organic oxygen compound (oxygenates) content	LST EN ISO 22854 (A procedure)	Gas chromatography (GC)
	Oxygen content	LST EN ISO 22854 (A procedure)	Gas chromatography (GC)
	Hydrocarbon type content	LST EN ISO 22854 (A procedure)	Gas chromatography (GC)
	Benzene content	LST EN ISO 22854 (A procedure)	Gas chromatography (GC)

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods	Techniques, methods and/or equipment used (where appropriate)
Motor fuels. Diesel	Cold filter plugging point	LST EN 116 (automated equipment)	Cooling, filtration
	Copper strip test (3 h at 50°C)	LST EN ISO 2160	Qualitative method
	Flash point	LST EN ISO 2719 (A procedure) (automated equipment)	Heating (Pensky-Martens closed cup method)
	Cloud point	LST EN ISO 3015	Cooling
	Kinematic viscosity at 40 °C	LST EN ISO 3104 (B procedure)	Viscosimetric method
	Manual sampling	LST EN ISO 3170	Sampling method (manual)
	Distillation	LST EN ISO 3405 (automated equipment)	Distillation
	Cetane index	LST EN ISO 4264	Calculation method
	Cetane number	LST EN ISO 5165	Motor method
	Ash content	LST EN ISO 6245	Burning, weighing
	Carbon residue (on 10% distillation residue)	LST EN ISO 10370	Burning, weighing
	Lubricity, wear scar diameter (WSD) at 60°C	LST EN ISO 12156-1 (A method)	Friction, microscopy
	Density at 15°C	LST EN ISO 12185	Oscillation-type densimetry (Oscillating U-tube method)
	Oxidation stability	LST EN ISO 12205	Oxidation, filtration, weighing
Aviation turbine fuels, kerosine	Total contamination	LST EN 12662	Filtration, weighing
	Polycyclic aromatic hydrocarbons content	LST EN 12916 (A procedure)	High-performance liquid chromatography (HPLC)
	Water content	LST EN ISO 12937	Coulometric titration
	Fatty acid methyl esters (FAME) content	LST EN 14078 (Range A and B)	IR spectrometry
	Sulphur content	LST EN ISO 20846	UV fluorescence
	Flash point	ASTM D 56 (automated equipment)	Heating (Tag closed cup method)
	Distillation	ASTM D 86 (automated method)	Distillation
	Copper strip test (2 h at 100°C)	ASTM D 130	Qualitative method
	Kinematic viscosity at minus 20°C	ASTM D 445	Viscosimetric method
	Aniline point	ASTM D 611 (E method)	Heating
	Aromatics	ASTM D 1319	Fluorescence adsorption
	Smoke point	ASTM D 1322 (automated procedure)	Thermal radiation
	Naphthalenes	ASTM D 1840 (B procedure)	UV spectrophotometry

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods	Techniques, methods and/or equipment used (where appropriate)
	Electrical conductivity	ASTM D 2624	Electrical conductivity method
	Sulphur, mercaptan	ASTM D 3227	Potentiometric titration
	Thermal stability JFTOT (2.5 h, control temp. 260°C)	ASTM D 3241	Qualitative method
	Acidity	ASM D 3242	Indicative titration
	Microseparometer (MSEP)	ASTM D 3948 (A mode)	Separation
	Density at 15°C	ASTM D 4052	Oscillation-type densimetry (Oscillating U-tube method)
	Manual sampling	ASTM D 4057	Sampling method (manual)
	Net heat of combustion	ASTM D 4529 (A procedure)	Calculation method
	Lubricity (Wear Scar Diameter)	ASTM D 5001 (automated method)	Friction, microscopy
	Sulfur content	ASTM D 5453	UV fluorescence
Refinery gas	Freezing point	ASTM D 7153	Cooling
	Level of cleanliness	IP 565	Optical method
	Gas Composition:	LST EN 15984	Gas chromatography (GC)
	Hydrogen		
	Oxygen		
	Nitrogen		
	Carbon monoxide		
	Carbon dioxide		
	Hydrogen sulfide		
	Methane		
	Ethane		
	Ethene		
	Acetylene		
	Propane		
	Propene		
	Propadiene		
	iso-Butane		
	n-Butane		
	trans-2-Butene		

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods	Techniques, methods and/or equipment used (where appropriate)
Fuel oil	1-Butene iso-Butene cis-2-Butene 1,3-Butadiene iso-Pentane n-Pentane Total Pentenes C6+		
	Carbon Content	LST EN 15984	Calculation method
	Lower Calorific Value	LST EN 15984	Calculation method
	Specific energy (heat of combustion)	ASTM D 4809	Thermal method
	Manual sampling	LST EN ISO 3170	Sampling method (manual)
	Water content	ISO 3733	Distillation
	Sulphur content	LST EN ISO 8754	X-ray fluorescence spectrometry
	Density at 15°C	LST EN ISO 12185	Oscillation-type densimetry (Oscillating U-tube method)
ENVIRONMENTAL ANALYSES			
Chemical analyses			
Air: indoor, ambient, workplace air, and that from fixed sources of pollution	Sampling for volatile organic compounds	LST EN ISO 16017-1:2002, cl. 9	Pumped sampling
Indoor, ambient, workplace air	Benzene content Toluene content Ethylbenzene content Xylene (m-, p-, o-) content	LST EN ISO 16017-1:2002	Gas chromatography method, flame ionization detector

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods	Techniques, methods and/or equipment used (where appropriate)
Air: pollutants emitted to ambient air by fixed sources of pollution	Benzene content n-butane content Cyclopentane content 2,4-dimethylpentane content Ethane content Ethylbenzene content Heptane content Hexane content Isobutane content Isopentane content Isopropylbenzene content n-pentane content l-pentane content Propane content n-propylbenzene content Styrene content Toluene content 1,2,3-trimethylbenzene content 1,3,5-trimethylbenzene content Undecane content Xylene (m-, p-, o-) content	LST EN ISO 16017-1:2002	Gas chromatography method, flame ionization detector
Physical factor analyses			
Natural and artificial lighting at workplaces	Natural light level (illuminance) Natural light coefficient Artificial light level (illuminance)	HN 98:2014 SVP FM A 02, Edition No 1, 2017	In situ measurements. Calculation based on in situ measurement results
Thermal environment at working premises	Air temperature Relative air humidity Air velocity	HN 69:2003 SVP FM ŠA 01, Edition No 1, 2017	In situ measurements
Acoustic noise in working environment	Equivalent continuous A-weighted sound pressure level C-weighted peak sound pressure level	LST EN ISO 9612:2009	Experimental method

* – The following degree of flexibility is defined and applicable for activities in the testing and sampling of petroleum products: application of the updated documents of test methods already covered by accreditation or replacing them.

Actual scope of accreditation is published on the website: www.orlenlietuva.lt

Director



Dalia Baležentė

Note. In case of any discrepancies, ambiguities or disputes regarding the subject matter content between the English and Lithuanian versions of the document, the Lithuanian version shall prevail.