Kyiv National University of Trade and Economics

Commodity Science and Customs Affairs Department

FINAL QUALIFYING PAPER

On the topic:

« Customs expert examination and taxation of light petroleum products import »

2nd year student of 10m group Specialty 076 "Entrepreneurship, Trade and Stock Exchange Activity" Specialization "Customs Affairs"

Scientific supervisor Doctor of Technical Sciences, Professor

Manager of the educational program Doctor of Technical Sciences, Professor Vladyslav Vecherenko

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Taras Karavayev

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Taras Karavayev

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АНОТАЦІЯ

Вечеренко В. Митна експертиза та оподаткування імпорту світлих нафтопродуктів.

У випускній кваліфікаційній роботі проаналізовано стан ринку, обсяги імпорту та експорту світлих нафтопродуктів та вимоги до їх якості в Україні та ЄС. Оглянуто законодавче регулювання експертизи та митного оформлення імпорту світлих нафтопродуктів. Висвітлено асортимент світлих нафтопродуктів, що ввозяться в Україну. Представлені результати проведеної митної експертної експертизи світлих нафтопродуктів. Визначено код світлих нафтопродуктів згідно з УКТЗЕД, проаналізовано правильність визначення митної вартості, повноту нарахування митних платежів та митне оформлення світлих нафтопродуктів, ввезених в Україну згідно з митною декларацією.

Ключові слова: світлі нафтопродукти, бензин, експертиза, митне оформлення, митна вартість, митні платежі, імпорт, код УКТЗЕД.

ANNOTATION

Vecherenko V. Customs expert examination and taxation of light petroleum products import.

In the final qualifying paper the state of the market, volumes of imports and exports of light petroleum products and their quality requirements in Ukraine and the EU are analyzed. Legislative regulation of expertise and customs clearance of imports of light petroleum products is observed. Assortment of light petroleum products imported into Ukraine is highlighted. The results of the carried out customs expert examination of light petroleum products are presented. The code of light petroleum products according to UCGFEA is defined, correctness of customs value calculation, completeness of customs payments charge and customs declaration have been analyzed.

Keywords: light petroleum products, gasoline, examination, customs clearance, customs value, customs payments, import, UCGFEA code.

ABBREVIATIONS

ARAMS - Automated Risk Analysis and Management System

ASTM - American Society for Testing and Materials

CCU – Customs Code of Ukraine

CD – customs declaration

CUFTA – Canada-Ukraine Free Trade Agreement

DSTU –is an acronym for *derzhavnyy standart Ukrayiny* (Ukrainian: державний стандарт), which means state standard of Ukraine

EFTA – The European Free Trade Association

EU – European Union

GOST - is an acronym for *gosudarstvennyy standart* (Russian: государственный стандарт), which means state standard or governmental standard; GOST standards were originally developed by the government of the former Soviet Union and some of them are still in force in Ukraine

HS - the Harmonized Commodity Description and Coding System (HS Convention)

ISO – International Standard Organization

MON - Motor octane number

RON - Research octane number

SCS – State Customs Service

UCGFEA - Ukrainian Classification of Goods for Foreign Economic Activity

VAT – value added tax

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INTRODUCTION

Topic actuality. Petroleum is a naturally occurring liquid found beneath the earth's surface that can be refined into fuel. The extraction and processing of petroleum, and thus, its availability, is a major driver of the world's economy and geopolitics. Petroleum products can be grouped into some categories, for example, primary end products produced in petroleum refining may be separated as light distillates, middle distillates, heavy distillates and others. In international trade there is even definition of these distillates. For instance, light distillates are petroleum products 90 vol.% of which are distilled at 210 ° C, so they can be distilled faster than other. Hence, we refer such goods to light petroleum products.

On the global arena, countries with the most powerful economy now are countries with the largest reserves of natural resources and oil especially. However, not only oil brings money to the countries but also the product of its processing. So, export and importation of petroleum product are very interesting issues as for business society as well as for governments of the countries. In Ukraine, most of the petroleum products are imported and Ukraine is dependent country from supply of this products. Nevertheless, in Ukraine there is no great scientific interest to focus on the light petroleum products, only generally oil products are discussed. Thus, there is a need to observe and present the peculiarities of taxation and connected to this expert examination of light petroleum products.

Research object – light petroleum products imported into Ukraine.

Research subject –assortment, quality indexes, code according to the UCGFEA, customs value, customs payment of light petroleum products.

The final qualifying paper purpose is to analyse the taxation of light petroleum products import and to conduct an expert examination connected to it.

To achieve the mentioned above purpose, the following **tasks** should be solved in the paper:

• to analyze world market of light petroleum products;

• to study legislative regulation of expertise and customs clearance of imports of light petroleum products;

• to learn quality requirements for light petroleum products in Ukraine and the EU;

• to analyze assortment of light petroleum products imported into Ukraine;

• to conduct a commodity science expert examination of light petroleum products for customs purposes;

• to determine UCGFEA code of the light petroleum products;

• to analyze customs valuation and taxation of imported light petroleum products;

• to analyze customs clearance of light petroleum products import.

Research methods: analytical, organoleptic, measuring and general scientific methods (system analysis and synthesis, comparison).

The final qualifying paper scientific originality. Systematically studied actual taxation, expert examination for customs purposes and customs clearance of imported light petroleum products and presented as analytical paper.

Obtained results practical value. Result of commodity science expert examination of light petroleum products, as well as analytics on world market, assortment, taxation, expert examination for customs purposes and customs clearance of imported light petroleum products can be used as basic study for the next steps in customs policy reforming as regards petroleum products import.

Research results approbation. The research results were presented and discussed at the III All-Ukrainian student scientific-practical conference "Actual problems of entrepreneurship, trade and marketing" and the article was published in the collection of students scientific articles: Vecherenko V. Expert examination of light petroleum products for customs purposes //Митна справа: практичний аспект: 3б. наук. ст. студ. – К. : Київ. нац. торг.-екон. ун-т, 2020. – С.145-151 [1].

The final qualifying paper structure and volume. The paper consists of an introduction, 3 charters, conclusions and recommendations, references, annexes. The main text of the paper includes 48 pages. The paper contains 6 tables and 5 figures. The list of references includes 59 items. 4 annexes to the paper placed on 44 pages.

CHAPTER 1

THEORETICAL PRINCIPLES OF EXPERTISE AND CUSTOMS CLEARANCE OF IMPORTS OF LIGHT PETROLEUM PRODUCTS

1.1 World market of light petroleum products

Petroleum products are materials obtained in a result of oil refining at refineries [1]. Petroleum products include various types of fuel (gasoline, diesel fuel, kerosene, etc.), lubricants, solvents, petrochemical raw materials etc. [2].

Light petroleum products according to the Harmonized Commodity Description and Coding System (HS Convention) [3] belong to "light oils and preparations" with HS code 2710 12. According to the subheading notes to the chapter 27 HS Convention "Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes", "*light oils and preparations*" are those of which 90 % or more by volume (including losses) distil at 210 °C according to the ISO 3405 method (equivalent to the ASTM D 86 method) [4]. Among light distillates are mainly motor gasoline and special gasoline, fuel for jet engines.

Thus, for analysis of the world market of light petroleum products we used trade statistics of the *International Trade Center*, based on the United Nation trade statistics, and its tool *Trade Map*, where such data for *HS code 271012* available from 2012 [5].

So, on the world market as regards light petroleum products imports, it was big decries during 2015-2016 (Fig.1.1.), which repeated little bit later in 2019. However still on the world market in 2019 value of the imported light petroleum products amounted 236,8 billion USD.

Among top-20 importers of the light petroleum products (73.5% of the light petroleum products world market), there are the United States of America, Mexico, Singapore, Republic of Korea, Netherlands, the United Arab Emirates, Japan, Indonesia, Canada, Malaysia, Belgium, Germany, Egypt, Brazil, South Africa, China, Thailand, Pakistan, Saudi Arabia and Philippines.



Fig. 1.1. Volumes of imports of light petroleum products in the world for 2012–2019

In 2019, the USA was the biggest importer of light petroleum products (Fig.1.2.). Value of the imported light petroleum products from the world market to the USA in 2019 was 25.6 billion USD (10.8 % of the light petroleum products world market). The second place at the rank of the top-importers was after Mexico with 15.6 billion USD of imported light petroleum products. It have to be noted that during the last five years the United States of America, Mexico, Singapore, Republic of Korea (South Korea) and Netherlands are top-5 importers of the light petroleum products in the world. Among all mentioned countries, the United Arab Emirates has positive imported growth in value every year that means that this country is importing more and more with positive dynamic.



Fig. 1.2. Top-15 importers of the light petroleum products at the world market in 2019

As regards the export of the light petroleum products and main countriessuppliers of such products, we found that among top-20 exporters (83.3 % of the world light petroleum products export) there are following countries: United States of America, United Arab Emirates, Netherlands, Singapore, Russian Federation, India, Republic of Korea, China, Belgium, United Kingdom, Spain, Italy, Qatar, Bahrain, Canada, Kuwait, Algeria, Malaysia, Norway and France. We see that six such counties like the United States of America, Netherlands, Singapore, South Korea, United Arab Emirates and Belgium are presented in the top-20 exporters and in the top-20 importers of the light petroleum products in the world.

Among suppliers of the light petroleum products 27.1 % of the world market owned by two countries the United States of America and the United Arab Emirates. In 2019, the United States of America gained 34.5 billion USD for it light petroleum products and almost the same quantity received the United Arab Emirates – 34.2 billion USD (Fig.1.3.).



Fig. 1.3. Top-15 exporters of the light petroleum products at the world market in 2019

Ukraine, unlike the largest player in this market, namely the United States, has a negative trade balance in light petroleum products trade. In the 2015-2019 periods, the largest volumes of exports and imports of the light petroleum products in Ukraine were observed in 2018 [6]. According to the State Statistical Service of Ukraine data, in 2019, Ukraine imported 1.4 billion litters of the light petroleum products that amounted in 909.3 million USD (Table 1.1). In 2019, Ukraine exported 150.7 thousand litters of the light petroleum products that amounted in 63.1 million USD.

The biggest volumes of the light petroleum products were exported by Ukraine to Latvia (34.5 million USD), Hungary (21.6 million USD) and Spain (3.2 million USD) in 2019.

In 2019, Ukraine imported light petroleum products (96.9 % of all Ukrainian light petroleum products imports) from Belarus 49.7% (452 million USD), Lithuania

Table 1.1

Year	Exports		Imports		
TE	Quantity, thousand liters	Value, million USD	Quantity, thousand liters	Value, million USD	
2015	n/a	6,5	2180011,4	839,6	
2016	n/a	22,2	1983224,2	682,3	
2017	7086,2	58,3	1671146,7	834,1	
2018	n/a	63,1	1511052,6	1088,6	
2019	150,7	59,3	1408379,5	909,3	

Exports and imports volumes of the light petroleum products in Ukraine in 2015-2019 (UCGFEA code 271012)

It is important to mention here that during the last years, Ukraine is trying to reduce supplies from Russian Federation and the same related to the import of the light petroleum products. In 2018, the value of the imported light petroleum products by Ukraine from Russian Federation amounted in 252.4 million USD that was 23.2 % of the total Ukrainian light petroleum products imports, and in 2019 such imports decreased by 13.5%, almost on 10% less.

1.2 Quality requirements for light petroleum products in Ukraine and the EU

In Ukraine requirements for the light petroleum products quality, gasoline, in particular, approved by the Resolution of the Cabinet of Ministers of Ukraine as of August 1, 2013 № 927 "On approval of the Technical Regulation on requirements for gasoline, diesel, marine and boiler fuels" [7].

According to ecological indicators, the following ecological classes of motor gasoline have been established: Euro3, Euro4, Euro5. Gasoline must meet the requirements set out in Annex 2 to the Technical Regulation [7] (Table 1.2).

Table 1.2

Gasoline Specifications	Unit	Value with	ogical Classes	
ET LOLET ENT		Euro3	Euro4	Euro5
Sulphur mass fraction, not more	mg/kg	150	50	10
Benzene volume fraction, not more	percent	NUTENKI	JU TEN K	JU EL KI
Concentration of lead, not more	mg/dm ³	5	5	5
Oxygen mass fraction, not more	percent			
for gasolines E5, E7		2,7	2,7	2,7
for gasolines E10		3,7	3,7	3,7
Volume fraction of hydrocarbons, not more:	<u> </u>			
Aromatic		42	35	35
Olephyne		18	18	18
Detonation resistance:				
Octane number by a research method, not less:	JUTE			
for A-80		80	80	
for A-92		92	92	92
for A-95		95	95	95
for A-98		98	98	98
Octane number by a motor method, not less::	-"-			
for A-80		76	76	
for A-92		82,5	82,5	82,5
for A-95		85	85	85
for A-98		88	88	88
Pressure of steams, within:	kPa			
In summer time		45-80	45-80	45-80
In winter time		60-100	60-100	60-100
In transition time		50-90	50-90	50-90
Volume fraction of bioethanol,	percent			
not more:				
for gasolines E5		5	5	5
for gasolines E7		more than 5 not more than 5 not more than 5 not more than 7 more than 7 more than 7		
for gasolines E10	KNUT	more than 7 not more than 7 not more than 7 not more than 10 more than 10 more than 10		

Quality requirements for light petroleum products in Ukraine [7]

It is prohibited in motor gasoline of ecological classes Euro3, Euro4 and Euro5 to use of additives (additives) containing at least one of the following components: phosphorus, lead and iron compounds, aromatic amines (monomethylanilines, monoethylanilines, etc.).

From January 1, 2017 in Ukraine prohibited using in motor gasoline of ecological class Euro5 additives with a manganese concentration of more than 6 milligrams per cubic decimetre.

Gasoline in Ukraine may contain dyes and markers.

It is possible to add to motor gasoline some additives (additives), bioethanol, ethyl-tert-butyl ether, which do not degrade the performance of the fuel, do not adversely affect the environmental, energy and economic performance of engines, as confirmed by test results and approved for use in the prescribed manner.

In Ukraine, there are requirements for the labelling of gasoline. The labelling of motor gasoline includes the name and brand of gasoline and contains the following groups of characters arranged in a certain sequence through a hyphen:

the first group - the letter A, the designation of gasoline for automobile engines with forced / spark ignition;

the second group - digital designation of the octane number of gasoline (80, 92, 95, 98) by a research method;

the third group - symbols of ecological class: Euro3, Euro4, Euro5;

the fourth group is a symbol for determining the content of bioethanol: E5, E7, E10.

An example of the labelling of motor gasoline with an octane number of 95 environmental class Euro4 with a bioethanol content of up to 7 % is the following: *gasoline A-95-Euro4-E7*.

The key document that lay out the official requirements for the quality light petroleum products in the EU are the Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC [8].

We can see that in the Directive 98/70/EC from the light petroleum products there are requirements for petrol. Petrol in the mentioned document means '*any volatile mineral oil intended for the operation of internal combustion positiveignition engines for the propulsion of vehicles and falling within CN codes 2710 11* 41, 2710 11 45, 2710 11 49, 2710 11 51 and 2710 11 59 (1)'.

According to the established rules in the EU, from January 1, 2000 the marketing of leaded petrol within EU territory prohibited. Only if petrol complies with the environmental specifications (Table 1.3), it is possible to place it on the EU market.

Table 1.3

Parameters	Unit	Limits	
E JULEY CULEY		Minimum	Maximum
Research octane number (RON)	NITE	95	INTER VAN
Motor octane number (MON)		85	KH TE KH
Vapour pressure, summer period	kPa	KNUTEY	60.0
Distillation:			
- percentage evaporated at 100 °C	% v/v	46.0	
- percentage evaporated at 150 °C	% v/v	75.0	
Hydrocarbon analysis:			
- olefins	% v/v	WHITE KIN	18.0
- aromatics	% v/v	L'UT-AK	35.0
- benzene	% v/v	KATEK	1.0
Oxygen content	% m/m		3.7
Oxygenates			
- Methanol	% v/v		3.0
- Ethanol (stabilising agents may be necessary)	% v/v		10.0
- Iso-propyl alcohol	% v/v	NONTE XAL	12.0
- Tert-butyl alcohol	% v/v	KUTEYK	15.0
- Iso-butyl alcohol	% v/v	KRUHTEK	15.0
- Ethers containing five or more carbon atoms per molecule	% v/v	EXNUTE	22.0
- Other oxygenates	% v/v	TE KAT	15.0
Sulphur content	mg/kg	TENNU	10.0
Lead content	g/l	NTENKH	0.005

Quality requirements for light petroleum products in EU [7]

Therefore, the main requirements to the light petroleum products are environmental. They include such parameters as octane number (RON minimum must be 95, MON - 85), vapour pressure, distillation, hydrocarbon analysis, oxygen content, oxygenates, sulphur content and lead content.

According to the quality requirements, sulphur content in petrol must be maximum 10.0 mg/kg.

Despite the vapour pressure must be not more 60 kPa, according to the point 3 of the Article of the Directive 98/70/EC [8], some countries with low ambient summer temperatures are allowed to place on the market during the summer period of petrol with a maximum vapour pressure of 70 kPa.

And also there is other exception : EU member states may continue to permit the marketing of small quantities of leaded petrol, with a lead content not exceeding 0,15 g/l, to a maximum of 0,03 % of total sales, in order to be used by old vehicles of a characteristic nature and to be distributed through special interest groups.

Hence, in Ukraine there are more quality requirements for light petroleum products in comparison with the EU, however they are not so strict in respect of environmental impact.

1.3 Legislation regulation of expertise and customs clearance of imports of light petroleum products

Legislative regulation of expertise and customs clearance of imports of light petroleum products we divide into 3 groups. The *first* one is connected to the expert examination of light petroleum products for customs purposes, the *second* one – to the particular standards for determination of parameters of the light petroleum products, and the *third* one – to the customs clearance of the light petroleum products.

The first group of documents, devoted to the examination of light petroleum products for customs purposes, includes the following documents:

- Customs Code of Ukraine [9], where there is Chapter 50 Customs examinations dedicated to the general principles of the expertise for customs

purposes for all goods crossing customs border of Ukraine, including light petroleum products;

- Law of Ukraine "On the Customs Tariff of Ukraine" as of 04.06.2020 674-IX [10]. In this document, there is a list of national tax rates - import duty on goods imported into the customs territory of Ukraine and systematized according to the Ukrainian Classification of Goods for Foreign Economic Activity (UCGFEA), compiled on the basis of the Harmonized Commodity Description and Coding System (HS). There are different rates (0%, 4%, 5%, 6%, 10%) of the import duty on the light petroleum products – the rates varies/depends from different factors like type of the light petroleum products, sulphur content, purpose (for jet engines or not), octane number, lead content;

- Resolution of the Cabinet of Ministers of Ukraine "On approval of the Procedure for maintaining the Ukrainian classification of goods for foreign economic activity and recognition as invalid of some resolutions of the Cabinet of Ministers of Ukraine" dated 21.05.2012 No 428 [11]. By this document was approved procedure for conducting the Ukrainian Classification of Goods of Foreign Economic Activity;

- Order of the SCSU "On approval of Explanations to the Ukrainian classification of goods of foreign economic activity" dated 14.07.2020 № 256 [12]. Consist of some explanatory notes as regards particularities of the mineral products as well as of light petroleum products definitions;

- Order of the Ministry of Finance of Ukraine "On approval of the Procedure for interaction of structural subdivisions and territorial bodies of the State Fiscal Service of Ukraine with the Specialized Laboratory for Examination and Research of the SFS during research (analyzes, examinations), Standards for sampling (samples) of goods for research (examination), act forms on sampling (samples) of goods and conclusion" dated 02.12.2016 No 1058 [13]. It includes general requirements for conducting research officially, all documentation that should follow the researched objects, standards for taking samples (samples) of goods for research (examination) as well as for light petroleum products -3.0/3.0 litters that means 3 litters for research

and the other 3 litters for leaving as control sample, the form of the act on sampling (samples) of goods and form of conclusion.

A typical scheme of light petroleum products expert examination in the Specialized Laboratory for Examination and Research (SLER) of the State Customs Service of Ukraine is shown at the figure 1.4. The results of the examination of light petroleum products for customs purposes are issued in the form of a conclusion.

Preparation by the official of the customs authority of the request to the SLER of the SCSU

Preparation by the official of the customs authority of a package of documentation for the object of research (accompanying documents, quality certificates, normative and technical data, etc.)

Sampling of light petroleum products by a customs official and sending them to the SLER

Carrying out of light petroleum products examination in the authorized customs laboratory (SLER of the SCSU)

Preparation by the inspector-expert of the customs laboratory of the conclusion and the protocol of researches

Sending the conclusion of the SLER of the SCSU with the results of the examination to the customs authority that made the request

Fig.1.4. Typical scheme of light petroleum products expert examination in the State Customs Service of Ukraine

The second group of documents, devoted to the examination of light petroleum products for customs purposes, includes the standards:

- DSTU ISO IEC 17025: 2006 General requirements for the competence of testing and calibration laboratories / ISO / IEC 17025: 2017 General requirements for the competence of testing and calibration laboratories [14].

- DSTU 4488: 2005 Oil and oil products. Sampling methods [15];
- ISO 3170: 2004 Petroleum liquids Manual Sampling [16];
- ASTM D 4057 Manual Sampling of Petroleum and Petroleum Products [17]

and a number of other standards, including on methods of definition of indicators of particular light petroleum product:

- ASTM D2699 – 92 Standard Test Method for Knock Characteristics of Motor Fuels by the Research Method [18];

- DSTU ISO 5164:2012 Petroleum products. Motor fuel. Determination of detonation characteristics by research method [19];

- ISO 5164:2014 Petroleum products - Determination of knock characteristics of motor fuels - Research method [20].

- ASTM D2700 – 19 Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel [21];

- ISO 5163:2014 Petroleum products - Determination of knock characteristics of motor and aviation fuels - Motor method [22];

- DSTU ISO 5163:2012 Petroleum products. Motor and aviation fuel. Determination of detonation characteristics by motor method [23];

- GOST 2177-99 "Petroleum products. Methods for determining the fractional composition" [24];

- EN 13016-1 : 2018 Liquid petroleum products - Vapour pressure - Part 1: determination of air saturated vapour pressure (ASVP) and calculated dry vapour pressure equivalent (DVPE) [25] ;

- DSTU EN 13016-1:2012 Liquid petroleum products. Saturated vapor pressure. Part 1. Determination of saturated vapor pressure with air content (ASVP) and calculation of equivalent dry vapor pressure (DVPE) (EN 13016-1:2007, IDT) [26];

- DSTU 4160:2003 Petroleum products. Determination of saturated vapor pressure. Reid's method [27];

- EN ISO 20846:2011 Petroleum products — Determination of sulphur content of automotive fuels — Ultraviolet fluorescence method (ISO 20846:2011) [28];

- EN ISO 13032:2012 Petroleum products — Determination of low concentration of sulphur in automotive fuels — Energy-dispersive X-ray fluorescence spectrometric method (ISO 13032:2012) [29];

- ASTM D4294-10 Standard test method for sulphur in petroleum and petroleum products by energy dispersive X-ray fluorescence spectrometry [30];

- EN ISO 6246:2017 Petroleum products — Gum content of fuels — Jet evaporation method [31];

- ASTM D381-19 Standard Test Method for Gum Content in Fuels by Jet Evaporation [32];

- DSTU EN ISO 3675:2012 Crude oil and liquid petroleum products. Method of laboratory determination of density by hydrometer [33];

- DSTU GOST 31072:2006 Oil and oil products. Method for determining density, relative density and density in degrees by API hydrometer [34];

- ASTM D1298-12b Standard test method for density, relative density, or API gravity of crude petroleum and liquid petroleum products by hydrometer method [35];

- ASTM D4052-11 Standard test method for density, relative density and API gravity of liquids by digital density meter [36];

- DSTU EN ISO 2160:2012 Petroleum products. Method for determining the corrosion effect on a copper plate [37];

- ASTM D130-12 Standard test method for corrosiveness to copper from petroleum products by copper strip test [38], etc.

The third group of documents is devoted to the customs clearance of the light petroleum products and includes:

- Customs Code of Ukraine [9];

- Resolution of the Cabinet of Ministers of Ukraine "Issues related to the use of customs declarations" from 21.05.2012 № 450 [39];

- Order of the Ministry of Finance of Ukraine "On approval of the Procedure for the implementation of customs formalities in the implementation of customs clearance of goods using a customs declaration on the form of a single administrative document" from $30.05.2012 \ N_{2} \ 631 \ [40];$

- Order of the Ministry of Finance of Ukraine "On the implementation of customs formalities in accordance with the declared customs regime" from $31.05.2012 N_{\odot} 657$ [41], and other valid documents concerning customs clearance.

It has to be emphasised here that customs procedure for light petroleum products is general and the same as for other goods crossing Ukrainian border, however since such products are excisable goods, there is special attention to them in relation to the correctness of calculation of the paid taxes that will be observed later in the chapter 3.

CHAPTER 2 CUSTOMS EXPERT EXAMINATION OF LIGHT PETROLEUM PRODUCTS

2.1 Organization, object and research methods

The object of work - light petroleum products transported cross the customs border of Ukraine and declared for customs clearance in the import customs regime. Motor gasoline A-95 "Premuim" was received by Zhytomyr customs for customs clearance according to CD No.UA903030 / 2019/011971 (Annex A). The following documents were provided for customs clearance of gasoline in addition to the customs declaration: contract No.LT/19/005/R/TN/E dated 20.12.2018 (Appendix B), invoice 10L371198 dated 07.05.2019 and quality certificate dated 06.05.2019 No. 136366 (Appendix C).

Gasoline batch, which was transported cross the customs border of Ukraine and declared for the customs clearance into the import customs regime, according to CD No. UA903030/2019/011971 in keeping the invoice 10L371198, included only one product declared as "automobile gasoline, unleaded A-95 "Premuim" with oxygen content up to 2.7% by weight, class B according to the declaration complies with LST EN 228: 2012 + A1: 2017, with a research octane number of 96.6, with a lead content of less than 2.5 mg / l, sulfur content 6.2 mg / kg (0.0006 2 % by weight), does not contain butylethanol or ethyl tert-butyl ether or their mixture. Density at 15 ° C - 733.8 kg / m³" under the UCGFEA code 27101245120.

The research was carried out according to the general scheme (Fig.2.1.) and in line with the established tasks.

For the research of the gasoline were used following methods:

 determination of functional groups and structure of the substance was performed using IR spectroscopy on the device HazMatID 360. IR spectras were obtained in the wavelength range 4000 sm-1. For identification of the components were compared obtained spectras with the standard spectras from the database of the libraries in the EZ Omnic v.6.1 and the other spectras in the references [42];

determination of the fractional composition of gasoline was carried out according to GOST 2177-99 "Petroleum products" [24] using the device AFC-1, the measurement error of the device is 0.3°C;



Fig. 2.1. General scheme of light petroleum products research

- determination of the mass fraction of sulfur was carried out on the device "Spectroscan SW-D3" The limits of the permissible absolute error of measurements of the device in the range from 3 to 60 mg / kg is ± 1.8 mg / kg (0.00018% by weight) [43];
- density was determined using a set of hydrometers AON-1 [33];
- determination of octane number was performed by the research method on the equipment VIIT-85 [44];
- determination of chemical composition was carried out by the method ASTM D5580 and ASTM D4815 (gas chromatograph "Agilent Technologies 6890 N Network GS System" [45, 46];
- determination of lead content (tetraethyl lead) was performed by X-ray fluorescence method ASTM D 5059-98 at X-ray fluorescence spectrometer TWIN X TXP-02. The measurement error of the device is not more than 0.00008 mg/l [47].

2.2 Assortment of light petroleum products imported into Ukraine

Different types of the light petroleum products can be found on the Ukrainian market and primarily it depends on the needs of consumers. Most common light petroleum products imported into Ukraine mainly include motor gasoline aviation gasoline (finished), kerosene, and jet fuel (Table 2.1).

Motor gasoline is a mixture of liquid hydrocarbons obtained during the processing of oil, gas condensate or their mixtures, which boils at a temperature of 30 ... 215 ° C and is used as a fuel for internal combustion engines with forced ignition of a fuel-air mixture. Gasoline A-92, A-95 and A-98 are among motor gasoline most imported to Ukraine.

Aviation gasoline (finished) is a mixture of relatively highly volatile hydrocarbons with small amounts of various additives or without them.

Classification of aviation gasoline is based on their anti-knock properties, expressed in octane numbers and in units of grade. Grades of aviation gasoline are usually marked by a fraction: in the numerator - octane number or grade on a poor mix, in a denominator - grade on a rich mix, for example, B-95/130. There is a marking of aviation gasoline with octane number (for example, B-70).

Kerosene is a mixture of hydrocarbons boiled in the temperature range 110... 320°C. It is obtained by distillation of oil (light fraction of atmospheric distillation) or cracking of heavy petroleum products. Used as a jet fuel, fuel for firing glass and porcelain, in household heating and lighting devices, devices for cutting metals, as a solvent, raw materials for the oil refining industry, herbicide.

Table 2.1

Types	Characteristics
Motor gasoline (finished)	a mixture of liquid hydrocarbons obtained during the processing of oil, gas condensate or their mixtures, which boils at a temperature of 30 215 ° C and is used as a fuel for internal combustion engines with forced ignition of a fuel-air mixture.
Aviation gasoline (finished)	a mixture of relatively highly volatile hydrocarbons with small amounts of various additives or without them. Additives provide use in reciprocating motors
Kerosene	a mixture of hydrocarbons boiled in the temperature range 110 320 ° C. It is obtained by distillation of oil (light fraction of atmospheric distillation) or cracking of heavy petroleum products. Used as a jet fuel, fuel for firing glass and porcelain, in household heating and lighting devices, devices for cutting metals, as a solvent, raw materials for the oil refining industry, herbicide
Jet fuel	petroleum fuel intended for aircraft with turboprop and turbojet engines. It is obtained by direct distillation of oil followed by hydrotreating. There are aviation fuels based on kerosene and gasoline. The latter has a lower freezing point and meets the requirements for engines at higher altitudes and speeds

Light petroleum products types [50]

Aviation kerosene include the following types [51]:

- *TS1* (a product of straight oil distillation with a fraction from 150 to 250 °C). This type of kerosene has found application as a fuel material for subsonic military and civil aviation;
- *T6* (obtained by deep hydrogenation of direct distillation fractions) does not apply to mass products and is mainly used for refueling supersonic aircraft;
- *T8B* (product of hydrotreating from fractions with boiling point from 165 to 280°C). Suitable for supersonic military aircraft;
- *RT* (produced by hydrotreating kerosene fractions boiling at temperatures from 135 to 280°C) is, along with TS1, a product of mass production. To increase antiwear properties, special additives are added to such fuel. This type of kerosene fully complies with world quality standards and can last up to ten years;
- *T1* (obtained as a result of distillation of low-sulfur grades of oil from fractions boiling at a temperature of 130 to 280°C). Such product, despite of its low sulfur content, has excellent lubricating characteristics, which are provided by the presence of naphthenic acids. But, at the same time, this type of kerosene is characterized by low temperature stability and contributes to the formation of deposits on engine elements. This type of kerosene is produced in limited quantities of the first grade;

T2 (product of direct distillation of fractions with boiling point from 60 to 280°C) includes gasoline fractions up to 2/5, therefore it has a low density. The use of such kerosene limits the flight altitude. Most often, this type of kerosene is used as a backup fuel.

Jet fuel (specialized aviation turbine fuel) is a petroleum fuel intended for aircraft with turboprop and turbojet engines. It is obtained by direct distillation of oil followed by hydrotreating. There are aviation fuels based on kerosene and gasoline. The latter has a lower freezing point and meets the requirements for engines at higher altitudes and speeds.

Jet A and Jet A-1 are the dominant jet fuels used in the world. The important difference between the two fuels is that Jet A-1 has a lower maximum freezing point

than Jet A (Jet A: -40° C, Jet A-1: -47° C). The lower freezing point makes Jet A-1 more suitable for long international flights, especially on polar routes during the winter [51].

Another jet fuel that is also commonly used in civil aviation equipped with turboprop or turbine engines is the **Jet B**, which is used to improve performance in cold weather.

2.3. Customs expert expertise of light petroleum products and its results documents

Usually light petroleum products are sent for expert examination into customs laboratory to confirm the UCGFEA code or in case of notification of the Automated Risk Analysis and Management System (ARAMS)[52].

In our case the motor gasoline A-95 "Premium", produced by JSC "Orlen Letuva" and imported by Private enterprise "Okko-Business Contract" according to contract No.LT/19/005/R/TN/E dated 20.12.2018 (Appendix B), was sent for the expert examination after notification of ARAMS with risk profile # 905-3 "Taking samples of goods for research in order to establish determined characteristics for goods classification according to UCGFEA". Appeared doubts that this gasoline can be classified under other UCGFEA code, namely *2710124901*. According to the box 33 of the customs declaration No.UA903030/2019/011971 (Annex A) the declared UCGFEA code was *27101245120*.

Therefore, the main task for this gasoline research was determination of the characteristics of the product important for its classification according to UCGFEA, specifically: chemical and fractional composition of the product (percentage content of components, % distillation at different temperatures, flash point, sulfur content).

Two gasoline samples were given for the research: one research sample and the other one - control sample. Samples were contained in two canisters 3 liters each with labels. The polymer film and the sign of the customs officer 903/034 were applied on top of each sample. The integrity of the packaging and customs sigh were not disrupted.

One randomly chosen sample was opened for the research and the other one was left in the laboratory as a control sample.

As a result of the given sample research the following is established.

The IR-spectra of the investigated sample contains absorption bands typical for aliphatic hydrocarbons, aromatic hydrocarbons and oxygen-containing compounds.

Determined physical and chemical characteristics of the sample are given in the Table 2.2.

Table 2.2

Parameter/Indicator	Actual sample values
Density at 15°C, kg/m ³	735.1
Fractional composition:	ANE THUE
T starting boiling point, °C	34
T 5% distillation, °C	45
T 10% distillation, °C	49
T 50% distillation, °C	75
T 90% distillation, °C	143
T end boiling point, °C	175
Residue,%	KUTE IKNUTE
Residue and loss,%	
Sulphur content, mg/kg	6.8
Lead concentration, mg/dm ³	does not contain
Research Octane Number	96,5
Total content of aromatic hydrocarbons, vol. %	24,34 (28,93 vol. %)
Volume fraction of benzene, vol. %	0,72 (0,87 vol. %)
Total content of oxygen-containing compounds, vol. %	13,54 (13,90 vol. %)
Volume fraction of MTBE, vol. %	11,19 (11,36 vol. %)
Volume fraction of methanol, vol. %	1,85 (2,0 vol. %)
Volume fraction of ethanol, vol. %	0,09 (0,10 vol. %)
Volume fraction of isopropanol, vol. %	0,03 (0,03 vol. %)
Volume fraction of tert-butanol, vol. %	0,14 (0,15 vol. %)
Volume fraction of isobutanol, vol. %	0,04 (0,04 vol. %)
Volume fraction of tert-pentanol, vol. %	0,20 (0,22 vol. %)

Physical and chemical characteristics of the gasoline sample

The discrepancy between two consecutive measurements for the temperatures of the starting boiling point, of 10-, 50-, 90% distillation and of 96-98% distillation and the end boiling point does not exceed the permissible values of the method [24].

The discrepancy between two consecutive results of the fractional composition when measuring the volumes of condensate does not exceed 1 cm³, and for the residue - 0.2 cm³.

The convergence between two parallel tests of sulphur content is 0.5 ppm, which is within the accuracy data on the convergence of measurements in accordance with DSTU EN ISO 20884:2012 - 1.9 ppm [43].

The convergence between results of the parallel tests of density does not exceed $0.5 \text{ kg/m}^3 (0.0005 \text{ kg/cm}^3)$ [33].

The discrepancy between two consecutive measurements for the RON does not exceed 0.5 units [44].

Hence, according to the provided sample research results the following is established.

The sample is identified as a clear liquid of light yellow colour, which by chemical composition is a mixture of aliphatic hydrocarbons, aromatic hydrocarbons (content is 24.34 vol. %), oxygen-containing compounds (content is 13.54 vol. %):

- fractional composition of the sample is specified in the table in Table 5;
- determined detonation stability (octane number) of the sample by the research method is 96.5;
- sulphur content in the sample is 6.8 mg/kg (0.00068 weight %);
- density of the samples at a temperature of 15 °C is 735.1 kg/m³;
- compounds with lead content (tetraethyl lead) in the sample by the used methods were not detected.

The conclusion of the expert examination of the motor gasoline A-95 "Premium", produced by JSC "Orlen Letuva" and imported by Private enterprise "Okko-Business Contract" is provided in the Annex D.

CHAPTER 3

TAXATION AND CUSTOMS CLEARANCE OF LIGHT PETROLEUM PRODUCTS

3.1 Determination of the light petroleum products code according to UCGFEA

Light petroleum products according to Ukrainian Classification of Goods for Foreign Economic Activity (UCGFEA) [53] belong to the chapter 27 "Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes" of the Section V "Mineral products".

The main features of the light petroleum products are given in the definition presented in the notes to the chapter 27 and , in particular, to the subheading 2710 12: ""light distillates and products" means petroleum products, 90% or more of which (including losses) are distilled at a temperature of 210 °C according to the ISO 3405 method (equivalent to the ASTM D 86 method)". So the main feature of such products its more than 90 vol.% of their *distillation at temperature 210*°C.

Next important features for light petroleum products classification according to UCGFEA are the following:

- *light petroleum products purpose*: for specific processing processes, for chemical transformations in processes or they can be used for other purposes.

In case if light petroleum products are used for *specific processing processes* than they will be classified in this UCGFEA category - **2710 12 11**. It has to be noted here that term "specific process" means the following processes:

1) vacuum, atmospheric-vacuum distillation;

2) secondary distillation with thorough fractionation;

3) cracking;

4) reforming;

5) extraction with selective solvents;

6) a process comprising all operations: treatment with concentrated sulphuric acid, oleum or sulphur dioxide; neutralization with alkaline agents; decolourization and purification with natural activated soils, activated carbon or bauxite;

7) polymerization;

8) alkylation;

9) isomerization;

10) degreasing by the method of fine crystallization (exclusively for products of product category 2712 90 31).

If light petroleum products are used for *chemical transformations* in processes than they will be classified in other UCGFEA category - **2710 12 15**. "Chemical transformation" means any operation with a molecular modification of one or more components of the oil subjected to processing. Simple mixing of petroleum products with another product, either petroleum or not, is not considered a "chemical transformation". In the explanation notes to the UCGFEA [53] the following examples of "chemical transformations" are provided:

1) treatment with halogens or halogenated compounds:

- reaction in the presence of propylene in the gaseous petroleum fraction to produce organic derivatives (e.g. propylene oxide);

- treatment of petroleum fractions (motor gasoline, kerosene, gas oil), paraffins (alkanes), petroleum waxes or paraffinic (alkane) residues with chlorine or chlorine compounds to obtain Chlorinated paraffins (chloroalkane);

2) treatment with sodium, potassium, and ammonium hydroxides to obtain naphthenic acids;

3) treatment with sulphuric acid or its anhydride:

- to obtain sulfonates;

- for the extraction or production of isobutylene;

- for the sulphonation of gas oil and lubricating oils.

Light petroleum products with *other purpose* than for specific processing processes and for chemical transformations will be classified in UCGFEA

categories - 2710 12 20, 2710 12 30, 2710 12 40, 2710 12 50, 2710 12 70, and 2710 12 90.

One more feature for classification of light petroleum products is *sulphur content* and it is divided into 3 groups : (up to 0.001 wt.%, 0.001-0.005 wt.%, more than 0.005 wt.%).

Then, type of gasoline also can influence classification, in case if our light petroleum product is gasoline than we should distinguish it as specific gasoline (2710 12 21 00, 2710 12 25 00) or other gasoline. Other gasoline is divided into 3 types: motor gasoline, jet fuel or other.

At additional levels of gasoline classification we would highlight lead content (up to 0.013g/l, more than 0.013g/l), octane number (less than 95, 95-98, more than 98), and content of bioethanol or ethyl tert-butyl ether or mixtures thereof (not less than 5 wt.% or other).

So, when we observing the case of imported automobile gasoline, unleaded A-95 "Premuim" with oxygen content up to 2.7% by weight, class B according to the declaration complies with LST EN 228: 2012 + A1: 2017, (CD UA903030/2019/011971 in the Annex A), we can take into account all mentioned above features of classification. Since the observe automobile gasoline has the parameters like research octane number - 96.6, lead content - less than 2.5 mg / l, sulfur content - 6.2 mg / kg, and it does not contain butylethanol or ethyl tert-butyl ether or their mixture than it can be classified with UCGFEA code 27101245120.

Hence, general features for classification of light petroleum products according to UCGFEA are the following: distillation at temperature 210°C, purpose, sulphur content (up to 0.001 wt.%, 0.001-0.005 wt.%, more than 0.005 wt.%), type of gasoline (special or other), purpose of gasoline (for motors, for jet engines, etc.), lead content (up to 0.013g/l, more than 0.013g/l), octane number (less than 95, 95-98, more than 98), and content of bioethanol or ethyl tert-butyl ether or mixtures thereof (not less than 5 wt.% or other).

3.2 Customs value and customs taxation of imports of light petroleum products

Light petroleum products taxed upon import. There are three types of taxes for such products: customs duty, excise tax and VAT.

Full rates of the *customs duties* on imported light petroleum products established by the Customs Tariff of Ukraine [10] are presented in the Table 3.1. Among these rates can be find 0%, 4%, 5%, 6%, and 10% customs duty.

The highest rate **10** % of customs duty is applied for the following imported light petroleum products: aviation gasoline (UCGFEA code 2710 12 31 00); motor gasoline with lead content less than 0,013 g/l, with octane number less than 80, and with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof more than 5 wt. % (UCGFEA codes 2710 12 41 11, 2710 12 41 12, 2710 12 41 13); motor gasoline with lead content less than 0,013 g/l, with octane number more than 98, and with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof more than 5 wt. % (UCGFEA codes 2710 12 49 01, 2710 12 49 02, 2710 12 49 09); and for imported jet fuel (UCGFEA code 2710 12 70 00).

6 % duty rate is applied only towards imported light distillates with UCGFEA code 2710 12 90 00.

5 % duty rate is applied for imported specific gasoline which is not a white spirit (UCGFEA code2710 12 25); for motor gasoline with lead content less than 0,013 g/l, with octane number up to 80, and with less than 5 wt. % content of bioethanol or ethyl tert-butyl ether or mixtures (UCGFEA codes 2710 12 41 14, 2710 12 41 15, 2710 12 41 19); motor gasoline with lead content 0,013 g/l or less, with octane number 98 or more with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof less than 5 wt. % (UCGFEA codes 2710 12 49 12, 2710 12 49 13, 2710 12 49 99); and for motor gasoline with lead content more than 0,013 g/l with octane number 98 or more (UCGFEA code 2710 12 59).

Other light petroleum products, not mentioned above are not subject to duty.

There is an exemption from import duty or a reduction in the rate of import duty on imports of goods from countries with which Ukraine has concluded free trade agreements. This applies in particular to light petroleum products from Canada, the EFTA countries and the EU.

Table 3.1

UCGFEA code	Description	Dutyrate(fullandpreferential),%
2710 11	light distillates and products for specific processing processes	0
2710 15	light distillates and products for chemical transformations in processes	
2710 12 21	specific gasoline - white spirit	0
2710 12 25	specific gasoline - other	5
2710 12 31 00	motor gasoline - aviation gasoline	10
2710 12 41 11 2710 12 41 12 2710 12 41 12	other motor gasoline with lead content 0,013 g/l or less, with octane number 80 or less , and with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof not less than 5 wt. %	10
2710 12 41 14 2710 12 41 15 2710 12 41 19	other motor gasoline with lead content 0,013 g/l or less, with octane number 80 or less , and with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof less than 5 wt. %	5 TELEX
2710 12 41 30	other motor gasoline with lead content 0,013 g/l or less, with octane number more than 80, but not more than 92	KHOETE
2710 12 41 90	other motor gasoline with lead content 0,013 g/l or less, with octane number more than 92 but less than 95	O
2710 12 45	other motor gasoline with lead content 0,013 g/l or less, with octane number 95 or more but less than 98	0
2710 12 49 01 2710 12 49 02 2710 12 49 09	other motor gasoline with lead content 0,013 g/l or less, with octane number 98 or more with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof not less than 5 wt. %	10
2710 12 49 12 2710 12 49 13 2710 12 49 99	other motor gasoline with lead content 0,013 g/l or less, with octane number 98 or more with a content of bioethanol or ethyl tert-butyl ether or mixtures thereof less than 5 wt. %	EKNYTE
2710 12 51	other motor gasoline with lead content more than 0,013 g/l with octane number less than 98	0
2710 12 59	other motor gasoline with lead content more than 0,013 g/l with octane number 98 or more	5
2710 12 70 00	jet fuel	10
2710 12 90 00	other light distillates	6

Rates of the customs duties on imported light petroleum products [10]

For example, on aviation gasoline imported from **EFTA countries** (Iceland, Liechtenstein, Norway and Switzerland) will be levied **1.9 %** of customs duty instead of 10 %, according to the Free Trade Agreement between the EFTA states and Ukraine signed on June 24, 2010 [55]. On aviation gasoline imported from **Canada** will be levied **0 %** of customs duty instead of 10 %, according to the Canada-Ukraine Free Trade Agreement signed on July 11, 2016, and entered into force on August 1, 2017 [56]. Imported aviation gasoline from **EU countries** will be levied of **3.8 %** customs duty instead of 10 % in accordance with the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part, signed on March 21, 2014, and entered into force on September 01, 2017 [57].

Imported light petroleum products are subject to **excise tax** in accordance with Tax code of Ukraine [54]. Excise tax rate for all light petroleum products from heading UCGFEA 2710 is *213,50 euro per 1000 litters*, except aviation gasoline (UCGFEA 2710 12 31 00) and jet fuel (UCGFEA 2710 12 70 00) for which excise tax is much higher - *270 euro per 1000 litters*. It has to be highlighted here that the measurement of litters should be calculated for temperature +15 °C.

VAT rate for all imported light petroleum products is 20 % [54].

In our analyzed case the motor gasoline A-95 "Premium" with UCGFEAD code 2710 12 45 12 (CD UA903030/2019/011971 - Annex A) was imported from Lithuania and the country of origin was declared as Lithuania about which was information in invoice # 10L37198 as well (information of the established form was made by the exporter in the invoice). That was the base for granting preference – 0% of customs duty.

The base for excise tax calculation is the quantity of litters, in particular, quantity of thousand litters. In our case in box 31 of the customs declaration were declared 440.993 thousand litters of the motor gasoline. Taking into account that the excise tax rate for products with UCGFEAD code 2710 12 45 12 is *213,50 euro per 1000 litters* and currency rate is *29.40474603 UAH per 1 EURO*, the total sum of

excise tax will be amounted **2768515.81 UAH** (440.993*213.5EUR*29.40474603UAH = 2768515.81 UAH).

To calculate customs value the contract value must be taking into account as the first and major basis. In our case the gasoline was sold according to the Contract of sale No.LT/19/005/R/TN/E dated 20.12.2018 (Appendix B). The price for the 440993 litters of the delivered gasoline A-95 "Premium" was 242 053.55 USD. It has to be highlighted that in the special part to this contacts in the point 5 it is written that for gasoline A-95 a conditional price is set for one metric ton and it is taken as average from the last 3 highest published quotes of "Gasoline 10pp" in Platts European Marketscan.

It is mentioned in the point 4.1 of the special part to Contract of sale No.LT/19/005/R/TN/E dated 20.12.2018 (Annex B) that goods are to be delivered on conditions of *DAP the border Belorussia-Ukraine, INCOTERMS 2010* (according to CD UA903030/2019/011971 (box 20) the gasoline was delivered on condition DAP BY Slovechno). Moreover it is mentioned in the point 5.1 of the special part that the price for the gasoline should be calculated taking into account the current crossing points. Therefore, now we see that the contact price and the customs value is the same for imported gasoline A-95 "Premium".

Thus, customs value of the imported gasoline A-95 "Premium" amounted 6353796.76 UAH (242 053.55 USD*26.24955000= 6353796.76 UAH).

As stated by Ukrainian legislation [54], the base for VAT calculation for imported goods is the sum of the customs value, customs duty and the excise tax. The total sum of VAT for imported motor gasoline A-95 "Premium" amounted 1824462.51 UAH (2768515.81 UAH +6353796.76 UAH)*20%=1824462.51 UAH.

Hence, the total sum of money paid for analyzed case of gasoline A-95 "Premium" import to Ukraine amounted **4592978.32 UAH** (2768515.81 UAH + 1824462.51 UAH = 4592978.32 UAH).

3.3 Analysis of customs clearance of light petroleum products import

Analysis of customs clearance of light petroleum products will be carried out for the case of importation of gasoline A-95 "Premium" from Lithuania to Ukraine. The sale contract (Annex B) was concluded between JSC "ORLEN Letuva" (exporter) and PE "OKKO-BUSINESS CONTRACT" (importer). This gasoline was sold on the conditions of delivery DAP BY Slovechno according to INCOTERMS 2010. The type of transport – rail transport. The sold quantity gasoline was 440.993 thousand litters calculated for 15 °C.

Following documents were given for customs clearance:

- Certificate of conformity 10 XU.00010-17 dated 30.06.17;
- Commercial invoice 10L371198 dated 07.05.2019 declaration of origin was done in this invoice;
- SMGS consignment note 0482066 dated 07.05.2019;
- Sale Contract LT/19/005/R/TN/E dated 20.12.2018 (Annex B);
- Agreement on the provision of customs broker services dated 09.11.2018;
- Quality passport # 136366 dated 06.05.2019 (Annex C);
- The copy of the customs declaration of the country of departure 19LTLC0100EK0B3D81 dated 07.05.2019.

After receiving of all the documents, the officials of customs authority recorded the date and time of submission of the CD for customs clearance. With the help of the automated system of customs clearance the customs declaration were registered under the number UA903030/2019/011971 in box A (Annex A). Later the correctness of CD filling and the documents determining the value of the goods were checked.

Concerning light petroleum products there is requirements that their description must contain additional information necessary for classification. Under number one in the box 31 of the customs declaration must be indicated the exact description of the goods declared to the customs authority: full name; technical and basic (main) commercial characteristics that determine the main qualitative and quantitative parameters of goods. Moreover, when customs declarations for light petroleum products are of types "IMXXYY" (where "XX" is the code of the corresponding customs regime "40" or "41", and one of the codes is "VY", "AA", "ДP", "ДE", "TK", "T Φ ", "TH", "ДT"), in the fields of "electronic invoice" for each item of goods must be indicated information about the volume of transported fuel by specifying information about the capacity (volume) of the container and the number in the unit of measurement "1000 liters and liters, recalculated to a temperature of 15°C" [58]. As we see from information in the box 31 of the CD UA903030/2019/011971 it was done.

Customs officer carried out a control comparison of the CD data with the data of other documents submitted by the declarant, namely:

- in column 28 CD - the details of the authorized bank according to the data contained in the list of authorized banks of Ukraine in the UAIS;

- the exchange rate indicated in column 23 of the CD to the official exchange rate as of the date of the CD submission - 26.24955000;

- the existence of sanctions applied to the PE "OKKO-BUSINESS CONTRACT" - no such sanctions were found;

- information on the calculation of customs and other payments and on the application of measures to ensure their payment. It has to be noted here that light petroleum products are in the list of products importation of which into the customs territory of Ukraine and / or movement through the territory of Ukraine by through and internal transit is subject to the obligatory provision of security for the payment of customs duties to the customs authorities, so the guaranties are needed [59] and in this case they also were provided.

An official of the customs authority carried out a risk assessment on CD UA903030/2019/011971 using an automated risk management system and found notification from ARAMS, when appeared risk profile N 905-3 "Taking samples of goods for research in order to establish determined characteristics for goods classification according to UCGFEA". After expert examination in customs laboratory the conclusion (Annex D) confirmed that according to examined parameters the sample corresponds to the declared UCGFEA code 2710124512.

To verify the correctness of determining the country of origin of the gasoline, the information specified in box 34 of the CD UA903030/2019/011971 (Appendix A) was compared with the information in the commercial invoice 10L371198. As a result of the inspection, it was established that Lithuania as the country of origin was identified correctly.

Than was checking the correctness of the application of tax preferences. In the analysed case, preferential rate of the customs duty 0% was due to declaration of origin that was done in Commercial invoice 10L371198, where was written that country of origin is Lithuania.

The correctness of determined customs value of gasoline A-95 "Premium" was checked using the Sale contract LT/19/005/R/TN/E (Appendix B), namely its points 4 and 5, where was find information on conditional price for one metric ton and that it has to be taken as average from the last 3 highest published quotes of "Gasoline 10pp" in Platts European Marketscan and this price is established for delivery of gasoline to the Ukrainian border with Belorussia to Slovechno-Berezhest. Customs value of the imported gasoline A-95 "Premium" 6353796.76 UAH was correct.

An official of the customs authority checked the correctness of the calculation of customs and other payments. The calculation of customs payments for customs clearance of gasoline A-95 "Premium" was correct (this issue was observed in detail in the previous point of this paper). The amount of excise tax was 2768515.81 UAH and VAT - 1824462.51 UAH.

After successful checks or carried out of customs formalities of automobile gasoline, unleaded A-95 "Premuim" with oxygen content up to 2.7% by weight, class B, its customs clearance was completed.

Hence, light petroleum products in order to have a free circulation permit on the Ukrainian market must meet the requirements of Technical Regulation on requirements for gasoline, diesel, marine and boiler fuels [7] that mean that Declaration of conformity must be submitted for customs clearance.

Concerning light petroleum products there is requirement that their description in the box 31 of the CD must contain additional information necessary for classification according to UCGFEA, including full name; technical and main commercial characteristics and also volume of transported light petroleum products (fuel) with the capacity (volume) of the container and the number in thousand litters, moreover these thousand litters must be recalculated to a temperature of 15°C.

In addition light petroleum products are in the list of products importation of which into the customs territory of Ukraine and / or movement through the territory of Ukraine by through and internal transit is subject to the obligatory provision of security for the payment of customs duties to the customs authorities, so the guaranties must be provided.

CONCLUSIONS AND RECOMMENDATIONS

Petroleum products are materials obtained in a result of oil refining at refineries, they include various types of fuel (gasoline, diesel fuel, kerosene, etc.), lubricants, solvents, petrochemical raw materials and other products.

Even though on the world market as to light petroleum products imports was big decries during 2015-2016, which repeated little bit later in 2019, the value of the imported light petroleum products amounted 236,8 billion USD in 2019.

Among top importers of the light petroleum products (73.5% of the light petroleum products world market), were found the United States of America, Mexico, Singapore, Republic of Korea, Netherlands, the United Arab Emirates and others. In 2019, the USA was the biggest importer of light petroleum products - 25.6 billion USD (10.8% of the light petroleum products world market).

Main countries-suppliers of light petroleum products (83.3 % of the world light petroleum products export) to the world market are: United States of America, United Arab Emirates, Netherlands, Singapore, Russian Federation, India and others. 27.1 % of the world market owned by two countries the United States of America and the United Arab Emirates. In 2019, the United States of America gained 34.5 billion USD for its light petroleum products and the United Arab Emirates – 34.2 billion USD.

It was found that six counties (the United States of America, Netherlands, Singapore, South Korea, United Arab Emirates and Belgium) are presented in the top-20 exporters and in the top-20 importers of the light petroleum products in the world.

Ukraine has negative trade balance in light petroleum products trade. In 2019, Ukraine imported 1.4 billion litters of the light petroleum products that amounted in 909.3 million USD and exported 150.7 thousand litters of the light petroleum products that amounted in 63.1 million USD.

In 2019, Ukraine imported light petroleum products from Belarus 49.7% (452 million USD), Lithuania 22.7 % (206.7 million USD), Russian Federation 13.5

(122.5 million USD), Bulgaria 11 % (99.8 million USD) of the total Ukrainian light petroleum products imports.

It was found that during the last years, Ukraine is trying to reduce light petroleum products supplies from Russian Federation. In 2018, the value of imported light petroleum products by Ukraine from Russian Federation amounted in 252.4 million USD that was 23.2 % of the total Ukrainian light petroleum products imports, and in 2019 such imports decreased by 13.5%, almost on 10% less.

Light petroleum products according to UCGFEA belong to the chapter 27 "Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes" of the Section V "Mineral products". General features for classification of light petroleum products according to UCGFEA are the following: distillation at temperature 210°C, purpose, sulphur content (up to 0.001 wt.%, 0.001-0.005 wt.%, more than 0.005 wt.%), type of gasoline (special or other), purpose of gasoline (for motors, for jet engines, etc.), lead content (up to 0.013g/l, more than 0.013g/l), octane number (less than 95, 95-98, more than 98), and content of bioethanol or ethyl tert-butyl ether or mixtures thereof (not less than 5 wt.% or other).

Most common light petroleum products imported into Ukraine include motor gasoline, aviation gasoline (finished), kerosene, and jet fuel.

Light petroleum products transported cross the customs border of Ukraine and declared for customs clearance in the import customs regime, in particular, motor gasoline A-95 "Premium" (UCGFEA code 27101245120) was chosen as object of research. This gasoline was produced by JSC "Orlen Letuva" and imported by Private enterprise "Okko-Business Contract" according to contract No.LT/19/005/R/TN/E dated 20.12.2018. During customs clearance the ARAMS notified the inspector with risk profile # 905-3 "Taking samples of goods for research in order to establish determined characteristics for goods classification according to UCGFEA" because the doubts that this gasoline can be classified under other UCGFEA code 2710124901.

For the expert examination of the gasoline were used following methods: determination of functional groups and structure of the substance using IR spectroscopy; determination of the fractional composition of gasoline; determination of the mass fraction of sulphur; density; determination of octane number; determination of chemical composition by the method ASTM D5580 and ASTM D4815 and determination of lead content (tetraethyl lead) by X-ray fluorescence method ASTM D 5059-98.

The researched sample is identified as a clear liquid of light yellow colour, which by chemical composition is a mixture of aliphatic hydrocarbons, aromatic hydrocarbons (content is 24.34 vol. %), oxygen-containing compounds (content is 13.54 vol. %), determined detonation stability (octane number) of the sample by the research method was 96.5, sulphur content in the sample was 6.8 mg/kg (0.00068 weight %), density of the samples at a temperature of 15 °C was 735.1 kg/m³ and compounds with lead content (tetraethyl lead) in the sample by the used methods were not detected. In the general the researched sample characteristics corresponded to the information stated in the customs declaration.

For customs clearance of gasoline A-95 "Premium" transported by rail and imported from Lithuania to Ukraine on the conditions of delivery DAP BY Slovechno according to the sale contract concluded between JSC "ORLEN Letuva" (exporter) and PE "OKKO-BUSINESS CONTRACT" were submitted Certificate of conformity 10 XIL.00010-17 dated 30.06.17; Commercial invoice 10L371198 dated 07.05.2019; SMGS consignment note 0482066 dated 07.05.2019; Sale Contract LT/19/005/R/TN/E dated 20.12.2018; Agreement on the provision of customs broker services dated 09.11.2018; Quality passport # 136366 dated 06.05.2019; the copy of the CD of the country of departure 19LTLC0100EK0B3D81 dated 07.05.2019.

Light petroleum products taxed upon import. There are three types of taxes for such products: customs duty, excise tax and VAT (20%). Among rates of import customs duty on light petroleum products there are 0%, 4%, 5%, 6%, and 10%. Excise tax rate for all light petroleum products from heading UCGFEA 2710 is 213,50 euro per 1000 litters, except aviation gasoline (UCGFEA 2710 12 31 00) and jet fuel (UCGFEA 2710 12 70 00) for which excise tax is higher - 270 euro per 1000 litters.

For imported gasoline A-95 "Premium" was chosen preferential rate of the customs duty 0% due to declaration of origin that was done in Commercial invoice

10L371198, where was written that country of origin is Lithuania. The customs value and the contact price and is the same for imported gasoline A-95 "Premium" and it is amounted 6353796.76 UAH. And only excise tax and VAT were paid in the observed case. The amount of calculated excise tax was 2768515.81 UAH and VAT - 1824462.51 UAH.

Light petroleum products in order to have a free circulation permit on the Ukrainian market must meet the requirements of Technical Regulation on requirements for gasoline, diesel, marine and boiler fuels that mean that Declaration of conformity must be submitted for customs clearance.

Concerning light petroleum products there is requirement that their description in the box 31 of the CD must contain additional information necessary for classification according to UCGFEA, including full name; technical and main commercial characteristics and also volume of transported light petroleum products (fuel) with the capacity (volume) of the container and the number in thousand litters, moreover these thousand litters must be recalculated to a temperature of 15°C.

Moreover, light petroleum products are in the list of products importation of which into the customs territory of Ukraine and / or movement through the territory of Ukraine by through and internal transit is subject to the obligatory provision of security for the payment of customs duties to the customs authorities, so the guaranties have to be provided.

Therefore, in this paper, actual taxation, expert examination for customs purposes and customs clearance of imported light petroleum products in Ukraine were systematically studied and we would suggest to use it as analytical paper or as basic study for the next steps in customs policy reforming as regards petroleum products import. Moreover, because of the found negative trade balance in light petroleum products, we would recommend for the Government of Ukraine to promote actively development of oil refineries in Ukraine. In addition, Ukraine should follow current strategy of reducing light petroleum products supplies from Russian Federation.

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