

Branch of a public joint stock company Bashneft Joint-Stock Oil Company Bashneft-UNPZ Legal address:

Russian Federation, 450077, Republic of Bashkortostan, Ufa, Karl Marx Str., 30, bld. 1 Production address:

Russian Federation, 450029, Republic of Bashkortostan, Ufa, Str. Ulyanovykh, 74 e-mail: info bn@bashneft.ru, tel. 8(347)242-55-17, fax 8(347)242-55-73
Testing Center - Quality Control Division (PCL)

Russian Federation, 450029, Republic of Bashkortostan, Ufa, Ulyanovykh Str., 74 e-mail: info bn@bashneft.ru, tel. 8(347)242-55-17, fax 8(347)242-55-73

## **CERTIFICATE Nº 6204**

Liquefied petroleum fuel gas for municipal consumption, propane-butane grade technical (PBT) according to GOST 20448-2018

Designation of documents that establish requirements for products: Technical Regulations of the Eurasian Economic Union "Requirements to Liquefied Petroleum gases for their use as fuel" (EAEU TR 036/2016) (Decision of the Council of the Eurasian Economic Commission of 09.08.2016 No. 68) (appendix "Requirements for physical and chemical and operational parameters of liquefied petroleum gases"); GOST 20448-2018 "Liquefied petroleum fuel gases for municipal consumption.

Declaration of conformity of the EEC N RU D-Yai.NP 02.V.00491/19 Term validity - until 03.07.2022

Specifications"

OKPD Code 2: 19 20 31 Batch number: 6204 Date of manufacture: 11.10.2020 Batch size (mass): 33.000 t Capacity: Capacity-17/5, Capacity-17/b

Place of sampling (according to GOST 14921-2018):

Date of sampling: 11.10.2020

Test date: 11.10.2020

The certificate was issued on the basis of the test report: No. 6204 dated 11.10.2020

Name of the indicator	Testing method	The norm for the EAEU TR 036/2016	Norm As to GOST 20448- 2018	Actual value
1. Content of components:	GOST 10679-2019			
- the amount of methane, ethane and ethylene, mass fraction, %			Not standardized Definition required	0.06
- the amount of propane and propylene, mass fraction, %			Not standardized Definition required	74.38
- the amount of butanes and butylenes, mass fraction, %			maximum 60.0	25.56
2. The content of hydrogen sulfide and mercaptan sulfur	GOST 22985-2017			
- mass fraction, %		maximum 0.013	maximum 0.013	0.0014
incl. hydrogen sulfide - mass fraction, %		maximum 0.003	maximum 0.003	Less than 0.0002%
3. Saturated vapor pressure, excess, MPa, at temperature: - plus 45°C	GOST 28656-2019	maximum 1.6	maximum 1.6	1.35
4. Volume fraction of liquid residue at 20°C, $\%$	item 9.2 and Appendix B GOST 20448-2018	maximum 1.8	maximum 1.6	Absence
5. Free water and alkali content	item 9.2 and Appendix B GOST 20448-2018	Absence	Absence	Absence
6. Odor intensity, Point	GOST 22387.5-2014	minimum 3	minimum 3	3

Conclusion: Liquefied petroleum fuel gas for municipal consumption, propane-butane technical (PBT) grade according to GOST 20448-2018

railway tank car 57897076

- Technical Regulations of the Eurasian Economic Union "Requirements for Liquefied Petroleum Gases for their Use as Fuel" (EAEU TR 036/2016) (Decision of the Council of the Eurasian Economic Commission No. 68 of 09.08, 2016) (Appendix "Requirements for Physical and chemical and Operational parameters of Liquefied Petroleum Gases");
- GOST 20448-2018 "Liquefied petroleum fuel gases for municipal consumption. Specifications".

Additional Information:

- the indicator of item 3 is not defective in agreement with the consumer; the aggregate state at a temperature of 20°C and a pressure of 760 mm Hg is gaseous;
- "It is allowed not to determine the intensity of the odor with a mass fraction of mercaptan sulfur in liquefied gas of 0.002% (20 ppm) or more."
- does not contain odorant;

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- transportation and storage according to GOST 1510-84;
- the manufacturer, a branch of PJSC ANK Bashneft Bashneft-UNPZ, quarantees the quality of liquefied petroleum fuel gas for municipal consumption of the propanebutane technical (PBT) grade according to GOST 20448-2018, subject to the conditions of transportation and storage according to GOST 1510-84 for 6 months from the date of manufacture
- safety data sheet No. 67827826.19.58294

Head of the Laboratory Senior Laboratory Assistant Certificate issue date 11.10.2020

Seal:

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signature	O.I. Garbaruk
signature	G.R. Harunova



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## APPENDIX TO CERTIFICATE No. 6204

Liquefied petroleum fuel gas for municipal consumption, propane-butane grade technical (PBT) according to GOST 20448-2018

Item	I tem No. Designation of a legislative act, regulatory document or set of rules	Information required for the product description		
No.		Name of the indicator	Testing method	Actual value
	1. Letter no. C3-73-80672 dated 14.08.2014. Determination of indicators for the Identification and Classification of liquefied Petroleum Gases in accordance with the Customs Union Commodity Classification of Foreign Economic Activity (hereinafter - CUCC FEA) (Decision of the Council of the Eurasian Economic Commission dated 16.07.2012 No. 54 (ed. dated 30.06.2017) "On Approval of the Customs Union Commodity Classification of English Engagement Activity (CUCC FEA) of the Eurasian	Mass fraction of components, %: - propane	GOST 10679-2019	19.78
		-propylene		54.60
		- the amount of butanes		13.93
	Classification of Foreign Economic Activity (CUCC FEA) of the Eurasian Economic Union and the Unified Customs Tariff of the Eurasian	- the amount of butylenes		11.63
	Economic Union")	Density at 15 °C, kg/m3	GOST 28656-2019	534.5

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