



QUALITY CERTIFICATE No. 2407



Hydrocarbon liquefied fuel gases for municipal and household consumption propane-butane technical (PBT) grade GOST 20448-2018 as amended

Declaration of Conformity of the EAEU N RU D- RU.CC06.B.00089/19 of
 28.06.2019 valid until 27.06.2022

EXPORT

Technical Regulations of the Eurasian Economic Union "Requirements for Liquefied Petroleum Gases for their Use as Fuel" (EAEU TR 036/2016)

Date of manufacture	27.12.2021	Product vessel No.	5/6
Date of sampling	27.12.2021	Net weight, t	34.750
Test date:	27.12.2021	Rail tank car No.	57847832

The tests were carried out at the Testing Center - Quality Control Department of NNK JSC
 Certificate of accreditation No. ROSS RU.0001.515720 Date of entry of information into the register of accredited entities July 29, 2015.

No. Item No.	Name of the indicator	Testing method	GOST 20448-2018 as amended	The norm for the EAEU TR 036/2016	Actually
1	Content of components: - the amount of methane, ethane and ethylene, mass fraction, %	GOST 10679-2019	Not standardized Definition required	-	0.0720
	- the amount of propane and propylene, mass fraction, %		Not standardized		83.24
	- the amount of butanes and butylenes, mass fraction, %		The definition must be at least 60.0		16.58
2	The content of hydrogen sulfide and mercaptan sulfur, - mass fraction, % including hydrogen sulfide - mass fraction, %	GOST 22985-2017	maximum 0.013	maximum 0.013	0.0022
			maximum 0.003	maximum 0.003	Less than 0.0002
3	Saturated vapor pressure is excessive, MPa, at temperature: - plus 45°C	GOST 28656-2019	maximum 1.6	maximum 1.6	0.4
4	Volume fraction of liquid residue at 20°C, %	GOST 20448-2018, item 9.2 and Appendix B	maximum 1.6	maximum 1.8	Absence
5	Free water and alkali content		Absence	Absence	Absence
6	Odor intensity, Point	GOST 22387.5-2014 item 7.1	minimum 3	minimum 3	-
	Note 1 to table 2 of item 5.2 of GOST 20448-2018: "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." Mass fraction of mercaptan sulfur, %				0.0022

Conclusion: Liquefied hydrocarbon fuel gas for municipal consumption of the propane-butane technical grade (PBT) meets the requirements:

- Technical Regulations of the Eurasian Economic Union "Requirements for Liquefied Petroleum Gases for their Use as Fuel" (EAEU TR 036/2016)
 GOST 20448-2018 as amended

Additional Information:

- Mass fraction of propane, %	GOST 10679-2019	83.24
- Mass fraction of the amount of butanes, %	GOST 10679-2019	15.86
- Density at a temperature of 15 ° C, kg/m ³	GOST 28656-2019	519.4

The manufacturer guarantees that the product quality meets the requirements of this standard, subject to the conditions of transportation and storage.
 The warranty period of storage is 6 months from the date of manufacture

Stamp here . Specialist

/signature/
 (signature)

R. A. Maksimenkova
 (surname, initials)

Certificate issue date: 30.12.2021

Seal:

Novokuibyshevsk, Samara region, Russian Federation
 Novokuibyshevsk Petrochemical Company Joint Stock Company
 For documents.