



UFAORGSINTEZ PJSC

450037. Russian Federation, Republic of Bashkortostan. Ufa city  
Quality Management. Testing Center for Petrochemical Products, Raw Materials and Environmental facilities  
Unique entry number in the register of accredited labs No.RA.RU.21UF03  
Laboratory for Quality control of Raw Materials and marketable Products



## CERTIFICATE No. 34-2021

### Liquefied petroleum fuel gas for municipal consumption, Propane technical (PT) grade GOST 20448-2018

**Grade** PT Grade **OKPD Code 2** 19.20.31.110  
**Date of manufacture** 30.10.2021  
**Test date:** 30.10.2021  
**Capacity:** 206 [ed. PUS]  
**The designation of the RD, according to which the sample was taken** GOST 14921

Item No.	Name of the indicator	RD on the test method	Norm		Established by analysis
			The norm for the EAEU TR 036/2016	The norm according to GOST 20448 for PT grade	
1	Content of components: the amount of methane, ethane and ethylene, mass fraction, %	GOST 10679-2019		not standardized	0.10
	the amount of propane and propylene, mass fraction, %		-	minimum 75.0	95.35
	the amount of butanes and butylenes, mass fraction, %		-	not standardized	2.90
	propane*, %		-	not standardized	92.31
2	Content of hydrogen sulfide and mercaptan sulfur, mass fraction, %	GOST 22985-2017	maximum 0.013		0.0022
	incl. hydrogen sulfide, mass fraction, %		maximum 0.003		Less than 0.0002%
3	Saturated vapor pressure, excessive, at a temperature of plus 45°C**, MPa	GOST 28656-2019	maximum 1.6		1.4
	minus 20°C (determined in winter)**. MPa	GOST 28656-2019	-	minimum 0.16***	0.14
4	Volume fraction of liquid residue at 20 °C**, %	GOST 20448-2018 item 9.2	maximum 1.8	maximum 0.7	Less than 0.50
5	Contents: Free water content	GOST 20448-2018 item 9.2	Absence		Absence
	Alkali content		Absence		Absence
6	Odor intensity****, point	GOST 22387.5-2014	minimum 3		No defined
7	Operating temperature, °C	GOST 28656-2019	not standardized		5
8	Density at operating temperature, kg/m3		not standardized		528.9

**Note:** EAC Declaration of Conformity No. EAEU No. RU D-RU.AD 82.At.00 156/20, valid until 03/16/2023. The product complies with the EAEU TR 036/2016

\*- this indicator is determined at the request of new

\*\* - this indicator is not included in the scope of accreditation of the Testing Center

\*\*\* - when producing PT grade gas from deethanized raw materials, the saturated vapor pressure at minus 20°C is allowed to be at least 0.14 MPa

\*\*\*\*- if the mass fraction of mercaptan sulfur in liquefied gas is 0.002% or more, it is allowed not to determine the intensity of the odor. If the mass fraction of mercaptan sulfur is less than 0.002% or the odor intensity is less than 3 points, the liquefied gases must be odorized according to the procedure approved in accordance with the established procedure

#### Conclusion: the product complies with GOST 20448-2018 is not subject to mandatory certification

The products are manufactured under the management of Management Systems certified for compliance with the requirements: ISO 9001:2015 certificate No. 31100600 QM15. ISO 50001:2018 Certificate No. 31100600 EMSt 18, ISO 14001 2015 Certificate No. 31100600 UM 15, ISO 45001:2018 Certificate No. 31100600 OHS18.

**Scope of application:** It is used as fuel for household consumption and industrial purposes.

**Characteristics of fire and explosion hazard:** Flammable liquefied gas, fire and explosive; ignites from sparks and flames; forms explosive mixtures with air in open areas, as well as in empty containers after a pressure drop; containers can explode when heated. The self-ignition temperature is 470°C (according to a mixture of butenes); the concentration limits of flame propagation, %: lower 1.7, upper 10.9; maximum explosion pressure 843 kPa (propane); the rate of increase of explosion pressure 24.8kG1a /s (propane).

**Transportation rules:** Liquefied hydrocarbon gases are transported by pipeline, transported by road, rail and water transport that meets the requirements of electrostatic intrinsic safety; in accordance with the rules of cargo transportation applicable to this type of transport, GOST 1510 (similar to hydrocarbon liquefied fuel gases), the rules for the device and safe operation of pressure vessels, safety rules in the gas industry (approved by Rostekhnadzor of the Russian Federation).

**Storage rules:** The product should be stored in accordance with GOST 1510 and the requirements for pressure vessels designed for liquefied petroleum gases. Avoid overheating, impacts on tanks (both full and empty); incompatible substances during storage - oxidizers, explosives, toxic and flammable substances and materials.

**Neutralization, disposal and dumping of waste:** in case of a small leak, eliminate the leak in compliance with precautionary measures; in case of an intensive leak, in agreement with specialists (fire protection, emergency situations) after determining the gas contamination zone, evacuating people and assessing the possible consequences of volumetric ignition of the gas-air mixture, ignite the escaping gas and let it burn out under the control of water jets; isolate the area until the gas dissipates; do not touch the spilled substance; dump the spill site, prevent the substance from entering reservoirs.

**Warranty period of storage:** 6 months from the date of manufacture

The manufacturer guarantees that the liquefied gas meets the requirements of the RD under the conditions of transportation and storage

Stamp here

Date of certificate registration 30.10.2021

EXAMPLE