

Joint Stock Company Angarsk Petrochemical Company Legal address:

665800, Irkutsk region, Angarsk, Pervyi industrial area, block 63, bld. 2

Place of manufacture: Irkutsk region, Angarsk city

e-mail: delo@anhk.rosneft.ru, Tel. (3955) 578-404: 577-002

Certificate of Quality Management System ISO 9001:2015 No. 19.2132.026 Certificate validity period: until 14.11.2022

ISO/TS 29001:2010 No. 19.2140.026 Certificate validity period: until 14.11.2022

Testing Center - Quality Control Division Joint Stock Company Angarsk Petrochemical Company

665830, Irkutsk region, Angarsk, territory of JSC Angarsk Petrochemical Company

e-mail: of61@anhk.rosneft.ru. Tel. (3955) 575-423

CERTIFICATE No. 258

Liquefied hydrocarbon fuel gas for municipal consumption, technical butane grade (BT) according to GOST 20448-2018

Declaration of Conformity of the EAEU No. RU D-RU.PA01 V.55571/19

Designation of documents that establish requirements for products: Technical Regulation of the Eurasian Economic Union TP EAEU 036/2016 "Requirements for liquefied"

petroleum gases for their use as fuel". GOST 20448-2018 "Liquefied petroleum fuel gases for municipal consumption.

Specifications"

OKPD 2 Code 19 20.31 120 Batch number: 258 Date of manufacture: 30.11.2021 Batch size (mass): 60.319 t

Sampling site (according to GOST 14921-2018): Tank No. E-4

Date of sampling: 30.11.2021 Test date: 01.12.2021

The certificate was issued on the basis of test results dated October 01, 2021 No. 5497-250102/PC



| No. | Name of the indicator | Test method | The norm for the EAEU TR 036/2016 | The norm according to GOST 20448-2018 | Actual value |
|-----|--|--|---|---|------------------|
| 1 | Content of components: X | GOST 10679- 2019 | | | |
| | the amount of methane, ethane and ethylene, mass fraction, % | | | Not standardized Definition required | less than 0.1 |
| | the amount of propane and propylene, mass fraction, % | | | Not standardized Definition required | 8.3 |
| | the amount of butanes and butylenes, mass fraction, % | | | minimum 60.0 | 90.0 |
| 2 | The content of hydrogen sulfide and mercaptan sulfur | GOST 22985- 2017 | | | |
| | mass fraction, % | | maximum 0.013 | maximum 0.013 | 0.0008 |
| | including hydrogen sulfide | GOST 22985- 2017 | | | |
| | mass fraction, % | | maximum 0.003 | maximum 0.003 | less than 0.0002 |
| 3 | Saturated vapor pressure is excessive, MPa, at temperature: | GOST 28656- 2019 | | | |
| | plus 45°C | | maximum 1.6 | maximum 1.6 | 0.49 |
| 4 | Volume fraction of liquid residue at 20 °C, % | GOST 20448- 2018 item 9.2 and Attachment B | maximum 1.8 | maximum 1.8 | less than 0.5 |
| 5 | Free water and alkali content | GOST 20448- 2018 item 9.2 and Attachment B | Absence | Absence | Absence |
| 6 | Odor intensity, Point | GOST 22387.5-2014 | minimum 3 | minimum 3 | 3 |
| 7 | Density at 15°C, kg/m3 | GOST 28656- 2019 | | not standardized | 684.8 |

Conclusion: Liquefied petroleum fuel gas for municipal consumption, butane technical grade (BT) according to GOST 20448-2018 Meets the requirements:

- -Technical Regulations of the Eurasian Economic Union TR EAEU 036/2016 "Requirements for liquefied petroleum gases for their use as fuel".
- GOST 20448-2018 "Liquefied petroleum fuel gases for municipal consumption. Specifications"

Information on the presence of additives in the fuel:

Information on the presence of an odorant:

odorant in the amount of up to 0.0% mass.

Continuation of certificate No. 258 dated 01.12.2021

Additional Information:

Transportation and storage of liquefied gases according to GOST 1510, the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), the manufacturer of JSC Angarsk Petrochemical Company guarantees compliance of liquefied petroleum fuel gas for municipal consumption, butane technical (BT) grade according to GOST 20448-2018 with the requirements of GOST 20448-2018, subject to the conditions of transportation and storage within 6 months from the date of manufacture, - safety data sheet No. 05742746.19,57286

Shift Supervisor /signature / D.S. Aikin

Stamp here

Certificate issue date: 01.12.2021

Accepted for shipment by the Logistics Department of RN-TRANS JSC

Seal:

Angarsk Petrochemical Company JSC for product certificates 5





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Appendix to Certificate No. 258 dated 01.12.2021 Liquefied hydrocarbon fuel gas for municipal consumption, technical butane grade (BT) according to GOST 20448-2018

GOST 20448-2018 "Liquefied petroleum fuel gases for municipal consumption. Specifications"

| No. | Designation of a legislative act, regulatory document or set of rules | Information required for the product description | | | |
|-------------|--|--|----------------|------------------|--|
| Item No. | | Name of the indicator | Testing method | The actual value | |
| 1 | Tax Code of the Russian Federation, Article 181, item 11 Decision of the Council of the Eurasian Economic Commission dated July 16, 2012 No. 54 "On Approval of the Eurasian Economic Union's Commodity Nomenclature of Foreign Economic Activity of the Eurasian Economic Union and the Unified Customs Tariff of the Eurasian Economic Union" Decision of the Board of the Eurasian Economic Commission No. 232 dated 22.10.2013 "On Amendments to the Additional Note of the Customs Union 1 to Group 27 of the Commodity Nomenclature of Economic Activity of the Customs Union" | The aggregate state at a temperature of 20 ° C and a pressure of 760 mm Hg. Processing name | | gaseous | |

Shift Supervisor /signature / D.S. Aikin