Joint Stock Company Novokuibyshevsk Petrochemical Company Russian Federation. Samara Region, Novokuibyshevsk city Email address: nnk@nnk.rosneft.ru tel.: (84635) 3-02-20 Certificate of quality management system for compliance with the requirements of ISO 9001:2015 No. 31100975QM15. Certificate validity period: until 27.09.2024



## **QUALITY CERTIFICATE No. 1985**

## Fraction of normal butane A Grade TS 0272-026-00151638-99 with amendments No 1-7

**EXPORT** 

 Date of manufacture:
 30.12.2021
 Bill of lading No.
 1/5

 Date of sampling:
 30.12.2021
 NET weight:
 37.350 t

 Test date:
 30.12.2021
 Rail tank car No.
 58194143

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.<br>Item<br>No. | Name of the indicator   | Norm   | Actually  | Testing method                      |
|--------------------|---|--|---|-------------------------------------|
| 1                  | Mass fraction of components. $\%$ : the amount of $C_1-C_2$ hydrocarbons propane isobutane the amount of butylenes normal butane the amount of Cs hydrocarbons and higher | maximum 0.5<br>maximum 1.5<br>maximum 1.0<br>minimum 97.5<br>maximum 0.6 | Less than 0.010<br>0.116<br>0.0412<br>99.84<br>Less than 0.0050 | GOST 10679-2019                     |
| 2                  | Mass fraction of hydrogen sulfide and mercaptan sulfur, %   | maximum 0.005  | 0.0013  | GOST 22985-2017                     |
| 3                  | Free water and alkali content   | Absence  | Absence   | TSU 0272-026-00151638- 99, item 5.3 |

## **Conclusion: The fraction of isobutane Grade A meets the requirements:**

-TS 0272-026-00151638-99 with amendments No 1-7

**Additional Information:** 

- Density at a temperature of 15°C, kg/m<sup>3</sup> GOST 28656-2019 584.6

The manufacturer guarantees the product quality conformance with that standard, subject to meeting the terms of transportation and storage.

Warranty period of storage - 3 months from the date of manufacture

Certificate issue date: 31.12.2021

Round stamp:

/ Russian Federation \* Samara Region\*

Novokuibyshevsk city

Joint Stock Company Novokuibyshevsk Petrochemical Company

For documents/