



JSC Ryazan Refining Company
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ISO 9001:2015 Quality Management System Certificate No. 31100440 QM15
Certificate validity period: through 29.06.2024

QUALITY CERTIFICATE NO. 29787 Fraction of normal butane, premium grade

Document establishing product specifications:
TU 0272-026-00151638-99 "Fraction of normal butane. Technical specifications."
OKPD 2 Code 19.20.31
Batch number: 29787
Date of manufacture: 28.12.2021
Batch size: 75 m³
Sampling location (according to GOST 14921-2018): tank No. E-144
Date of sampling: 28.12.2021
Test date: 28.12.2021
The tests were performed: Shop No. 10 Testing Laboratory -
Central Factory Laboratory
The certificate was issued based on the quality analysis dd 28.12.2021 No. 11727

Item No.	Indicator	Testing method	GOST 9572-93 Standard	Actual value
1	Mass fraction of components, %: propane isobutane total amount of butylenes normal butane the amount of iso- and normal pentane and above *propylene *total amount of butanes	GOST 10679-2019	no more than 0.3 no more than 0.9 no more than 0.5 no less than 98.6 no more than 0.4 - -	0.118 0.366 0.068 99.399 less than 0.010 0.037 99.765
2	Mass fraction of hydrogen sulfide and mercaptan sulfur, %	GOST 22985-2017	no more than 0.005	less than 0.0002
3	Free water and alkali content	As per p. 5.3 TU 0272-026-00151638-99	absent	absent

* determining indicators in order to identify and classify liquefied hydrocarbon gases in accordance with the Customs Union Commodity Classification for Foreign Economic Activity (letter No. C3-73-80672 dd 14.08.2014).

Conclusion: Fraction of normal butane, grade A **meets the technical requirements of:**

- TU 0272-026-00151638-99 "Propane-propylene fraction. Technical specifications."

Additional Information:

- marking, transportation and storage - according to GOST 1510-84;
- the warranty period of storage is 3 months from the date of manufacture.

L.S.

Shift process engineer, shop No. 11
(Power of attorney No. 381 dated 18.12.2020)
Certificate issue date 28.12.2021 13:06

signature

E.P. Yakimushkin