

Limited Liability Company Shkapovskoe Gas Processing Plant
Production address: Russian Federation, 452017, Republic of Bashkortostan, Priyutovo village
Production Laboratory
Russian Federation, 452017, Republic of Bashkortostan, Priyutovo village, tel.: 8(34786)38-307

CERTIFICATE No. 2093

ISOBUTANE FRACTION TS 0272-025-00151638-99 with amendments 1,2,3,4

Documents establishing requirements to products:
TS 0272-025-00151638-99 "Isobutane fraction. Specifications" with amendments 1,2,3,4
OKPD 2 Code: 19.20.31
Batch number: 2093
Filling date: 27.12.2021
Batch size (mass): 80.400 t of oil.
Place of sampling (according to GOST 14921): railway tank car 55696413; 54649694
Date of sampling: 27.12.2021
Test date: 27.12.2021

No.	Name of the indicator	Test method	Norm according to TS 0272-025-00151638-99				Actual value
			Grade Highest	Grade A	Grade B	Grade C	
1.	Mass fraction of components, %:	GOST 10679	Not standardized				< 0.01
	- the amount of C1-C2 hydrocarbons						
	- propane, max		1.3	1.5	4.5	8.0	0.31
	- isobutane, minimum		98.0	97	90.0	70.0	99.18
	- the amount of butylenes, max		0.5	0.5	0.5	Not standardized	0.34
	- normal butane, max		0.7	2.0	6.0	Not standardized	0.17
	the amount of hydrocarbons Cs and higher, max	Absence	Absence	0.5	1.0	Absence	
2.	Mass fraction of hydrogen sulfide and mercaptan sulfur, %, max	GOST 22985	0.005	0.005	0.005	0.01	0.0116
3.	Free water and alkali content	Item 5.2 of TS 0272-025-00151638-99	Absence				Absence
4.	Density at 15°C, kg/m ³	GOST 28656	Not standardized				563.4

Conclusion: The product quality corresponds to the grade "illegible" according to the requirements of TS 0272-025-00151638-99 "Isobutane fraction. Specifications" with amendments 1,2,3,4

*- in agreement with the consumer

Additional requirements:

- transportation and storage shall be carried out according to the requirements of GOST 1510;
- the manufacturer (LLC Shkapovskoe GPP) guarantees that the quality of the product meets the requirements of GOST R 0272-025-00151638-99 within 3 months from the date of manufacture, subject to the consumer's conditions of transportation and storage;
- safety Data Sheet No. 38504529.19.49747

Head of the production laboratory
Laboratory assistant signature O.B. Jakunina
Certificate issue date: 28.12.2021

signature I.L. Tuchina

Round seal: /Illegible /

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