



QUALITY CERTIFICATE No. 22

Isopentane fraction

Grade A

TU 0272-028-00151638-99 with amendments No. 1-15

EXPORT

Date of manufacture	14.12.2021	Product vessel No.	E-1/1
Date of sampling	14.12.2021	Net weight, t	38,550
Test date:	14.12.2021	Rail tank car No.	50515980

The tests were carried out at the Test Center - Quality Control Department of JSC NNK
 Certificate of accreditation № POCC RU.0001.515720. Date of information entry into the register of accredited entities July 29, 2015.

Item No.	Name of the indicator	Norm	Actually	Testing method
1	Mass fraction of components, %: the amount of paraffins C ₂ -C ₄ Isopentane pentane cyclopentane + total C ₆ sum of olefins C ₄ -C ₅	maximum 1.5 no less than 97.5 no more than 2.5 no more than 0.3 no more than 0.5	1.34 97.92 0.74 less than 0.01 less than 0.01	GOST-24676-2017
2	Total sulfur content, mg/kg	no more than 30	14	ISO 20884:2019
3	Alkali content	Absence	Absence	GOST-6307-75
4	Content of water and mechanical impurities	Absence	Absence	TU 0272-028-00151638-99 cl. 5.2
5	Density at 20 °C, kg/m ³	Not standardized. Definition required	619.1	GOST 28656-2019 with addition according to clause 5.4 of TU 0272-028- 00151638-99

Conclusion: Isopentane fraction Grade A meets the requirements:

- TU 0272-028-00151638-99 with amendments No. 1-15

Additional Information:

- Density at a temperature of 15 °C, kg/m³ GOST-28656-2019 623.4

The method for calculating the density at 15 °C is not included in the scope of accreditation of the Testing Center - Quality Control Department of JSC "NNK".

The manufacturer guarantees that the product quality meets the requirements of this standard, subject to the conditions of transportation and storage.

The warranty period of storage is 6 months from the date of manufacture.

L.S.	Specialist	_____ /signature/ (signature)	I.I. Krylova (last name, initials)
/seal /Russian Federation* Samara Region* Novokuibyshevsk, Joint Stock Company "Novokuibyshevsk Petrochemical Company" For documents*/			

Certificate issue date: 14.12.2021