NK Rosneft PJSC RN-Krasnodarneftegaz LLC Oil, gas and water treating shop No. 2 (OGWTS No. 2)

QUALITY CERTIFICATE No. 120 Fraction of light hydrocarbons (according to 0251 -005-00148300-2003)

Manufacturer: LLC PR-Krasnodarneftegaz, OGWTS No. 2

Legal address: Russia, 350000, Krasnodar, Kubanskaya embankment, 47

Actual address: Russia, 353531, Krasnodar Krai, Slavyansky district, kh. Baranikovsky

Date of sampling: 25.09.2017

Tank (capacity measure) E-301/1

No.	Indicators name	Norm according to	Test result
p/l		TS 0251-005-00148300- 2003, Unit of	Unit of meas.
		meas.	
1	Fractional composition:		
	The beginning of boiling	Not lower than 20°C	30.0
	The end of boiling	Not higher than 175°C	136.0
	Volume fraction of the remainder in the flask	Maximum 2.5%	1.0
2	The content of the actual resins	Maximum 10.0 mg/100 cm ³ fraction	Absence
3	Saturated vapour pressure	Maximum 1350 hPa	1000 hPa
4	Copper plate test	Sustains	Sustains
5	Content of water and mechanical impurities	Absence	Absence
6	Color	Colorless, transparent	Colorless, transparent

Note:

The results are determined by the manufacturer in the Testing Laboratory (TL) LLC RN-Krasnodarneftegaz, certificate of accreditation No. RA.RU .22.07.2015.22HT28 dated 22.07.2015

FOR REFERENCE: The density of fraction of light hydrocarbons at a temperature of 15°C and a pressure of 760 mmHg is 664.9 kg /m³. The density of fraction of light hydrocarbons at a temperature of 20°C and a pressure of 760 mmHg is 660.1 kg /m³.

Head of OGWTS No. 2	/ <u>signature /</u>	E.V. Horev
Head of TL No. 3	/ <u>signature /</u>	N.V. Pokhlebaeva

Date of issue of the quality certificate: 25.09.2017

NK Rosneft PJSC RN-Krasnodarneftegaz LLC Oil, gas and water treating shop No. 2 (OGWTS No. 2)

QUALITY CERTIFICATE No. 119

Fraction of light hydrocarbons (according to TS 0251-005-00148300-2003)

Manufacturer: SOO "RN-Krasnodarneftegaz", OGWTS No. 2

Legal address: Russia, 350000, Krasnodar, Kubanskaya embankment, 47

Actual address: Russia, 353581, Krasnodar Krai, Slavyansky district, kh. Baranikovsky

Date of sampling: 22.09.2017

Tank (capacity measure) E-301/2

No.	Indicators name	Norm according to	Test result Unit of
Item No.		TS 0251-005-00148300- 2003	meas.
		Unit of meas.	
	Fractional composition:		
	The beginning of boiling	Not lower than 20°C	31.0
1	The end of boiling	Not higher than 175°C	136.0
	Volume fraction of the remainder in the flask	Maximum 2.5%	1.0
2	The content of the actual resins	Maximum 10.0 mg/100 cm ³ fraction	Absence
3	Saturated vapour pressure	Maximum 1350 hPa	940 hPa
4	Copper plate test	Sustains	Sustains
5	Content of water and mechanical	Absence	Absence
	impurities		
6	Color	Colorless,	Colorless,
		transparent	transparent

Note:

The results are determined by the manufacturer in the Testing Laboratory (TL) LLC RN-Krasnodarneftegaz, certificate of accreditation No. RA.RU .22.07.2015.22HT28 dated 22.07.2015

FOR REFERENCE: The density of fraction of light hydrocarbons at a temperature of 15°C and a pressure of 760 mmHg is 664.9 kg /m³. The density of fraction of light hydrocarbons at a temperature of 20°C and a pressure of 760 mmHg is 660.1 kg /m³.

Head of OGWTS No. 2

Head of TL No. 3

/ <u>signature</u> / / <u>signature</u> /

E.V. Horev

N.V. Pokhlebaeva

Date of issue of the quality certificate: 22.09.2017