Angarsk Petrochemical Company Joint-Stock Company
Legal address and place of production:
Russian Federation, 065830, Irkutsk region, Angarsk
e.mail: delot@anhk.rosnefl.ru. tel. (3955) 578-404:677-002
ISO 3001:2008 Quality Management System Certificate No. 18.1675.026
Certificate is valid till 15.09.2018
ISO/TS 29001:2010 No. 16.1887.026
Certificate is valid till 14.11.2019
Testing Center - Quality Control Division
665830, Irkutsk region, Angarsk
Angarsk Petrochemical Company Joint-Stock Company
e-mail: deloNanhk.rosneft.ru. tel. (3955) 578-404: 577-002
Accreditation certificate of the testing center № RA.RU.22NH39
The validity period of the accreditation certificate is not limited.

CERTIFICATE No. 27

High pressure liquified carbon dioxide, first grade

(Food supplement - carbon dioxide E290)

Declaration of conformity of the Customs Union No. RU D-RU.AE56.B.04259
Valid till 24.04.2019
Certificate of Conformity No.RPSS RU.I1288.0S16.00011
Valid till 06.08.2018

Designation of documents establishing requirements for fuel:
Technical Regulations of the Customs Union TP CU 029/2012 “Safety requirements for food additives, flavorings and technological aids”;
Technical Regulations of the Customs Union 022/2011 “Food products in terms of their labeling”
GOST 8050-85 “Carbon dioxide, gaseous and liquid. Technical Specifications”.
OKP CODE 211451
Batch No.: 27
Date of production: 15.08.2017
Size (weight) of the batch: 0.273 t
Place of sampling (under GOST 8050): Pipeline No. 10902
Sampling date: 15.06.2017
Date of testing: 15.06.2017
The certificate is issued based on the test report of 15.08.2017 No. 1836-250102/PK

No.	Indicator Name	Test method	Standard acc. to TP TC 029/2012	Standard under GOST 8050-85	Actual value
1	Volume fraction of carbon dioxide (CO_2), %	GOST 8050 cl. 4.3	not less than 99	not less than 99.5	99.9
2	Volume fraction of carbon monoxide (CO)	GOST 8050 cl. 4.4		Must withstand a test according to cl. 4.4	Withstands the test according to cl. 4.4
3	Mass concentration of mineral oils and mechanical impurities, mg/kg	GOST 8050 cl. 4.5.2		not more than 0.1	less than 0.1
4	Presence of hydrogen sulphide	GOST 8050 cl. 4.6		Must withstand a test according to cl. 4.6	Withstands the test according to cl. 4.6
5	Presence of hydrochloric acid	GOST 8050 cl. 4.7		Must withstand a test according to cl. 4.7	Withstands the test according to cl. 4.7
6	Presence of sulfurous and nitrous acids and organic compounds (alcohols, ethers, aldehydes and organic acids)	GOST 8050 cl. 4.8		Must withstand a test according to cl. 4.8	Withstands the test according to cl. 4.8
7	Presence of ammonia and ethanolamines	GOST 8050 cl. 4.9		Must withstand a test according to cl. 4.9	Withstands the test according to cl. 4.9
8	Smell and taste	GOST 8050 cl. 4.10		Must withstand a test according to cl. 4.10	Withstands the test according to cl. 4.10
9	Mass fraction of water, %	GOST 8050 cl. 4.11		Must withstand a test according to cl. 4.11	Withstands the test according to cl. 4.11
10	Mass concentration of water vapor at a temperature of 20ºC and a pressure of 101.3 kPa (760 mm Hg), g/m^3	GOST 8050 cl. 4.12		not more than 0.184	0.148
	which corresponds to the saturation temperature of carbon dioxide with water vapor at a pressure of 101.3 kPa (760 mm Hg)				
	at a temperature 20ºC	GOST 8050 cl. 4.12		not higher than -34	-36
11	Presence of aromatic hydrocarbons	GOST 8050 cl. 4.13		Must withstand a test according to cl. 4.13	Withstands the test according to cl. 4.13

12	Presence of vanadium oxides	GOST 8050 cl. 4.14**		Must withstand a test according to cl. 4.14	

Conclusion: High pressure liquified carbon dioxide, first grade complies with the requirements:
- Technical Regulations of the Customs Union TP CU 029/2012 “Safety requirements for food additives, flavorings and technological aids”
- Technical Regulations of the Customs Union TP CU 022/2011 “Food products in terms of their labeling”
- GOST 8050-85 “Carbon dioxide, gaseous and liquid. Technical Specifications"

Additional information:
“ - the test method is not included in the scope of accreditation.
Technological functions - acidity regulator, propellant, packing gas. Vanadium oxides in accordance with cl. 12 should be determined only by enterprises that manufacture carbon dioxide for food purposes from waste gases from ammonia production, where vanadium oxide is used as an inhibitor in cleaning solutions. Transportation and storage according to GOST 8050.
The warranty period of storage in cylinders is 2 years from the date of manufacturing, according to GOST 949.