



Angarsk Petrochemical Company Joint-Stock Company
 Legal address and place of production:
 Russian Federation, 065830, Irkutsk region, Angarsk
 e.mail: delot@anhk.rosneft.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: delot@anhk.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. 66
Solid carbon dioxide

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. No. 1836-250102/PK



| No. | Indicator Name | Test method | Standard under GOST | Actual value |
|-----|---|---------------------|---|---|
| 1 | Appearance | GOST 12162 cl. 3.2 | 12162-77 White blocks | White blocks |
| 2 | Mass fraction of carbon dioxide, % | GOST 12162 cl. 3.3 | 99.96-99.98 | 99.98. |
| 3 | Mineral oil content | GOST 12162 cl. 3.4 | Must withstand a test according to cl. 3.4 | Withstands the test according to cl. 3.4 |
| 4 | Content of hydrogen sulphide | GOST 12162 cl. 3.5 | Must withstand a test according to cl. 3.5 | Withstands the test according to cl. 3.5 |
| B | Content of hydrochloric acid | GOST 12162 cl. 3.6 | Must withstand a test according to cl. 3.6 | Withstands the test according to cl. 3.6 |
| 6 | Content of sulfurous and nitric acids and organic compounds (alcohols, ethers, aldehydes and organic acids) | GOST 12162 cl. 3.7 | Must withstand a test according to cl. 3.7 | Withstands the test according to cl. 3.7 |
| 7 | Content of ammonia and monoethanolamines | GOST 12162 cl. 3.8 | Must withstand a test according to cl. 3.8 | Withstands the test according to cl. 3.8 |
| 8 | Smell and taste | GOST 12162 cl. 3.9 | Must withstand a test according to cl. 3.9 | Withstands the test according to cl. 3.9 |
| 9 | Content of aromatic hydrocarbons (including benzene) | GOST 12162 cl. 3.10 | Must withstand a test according to cl. 3.10 | Withstands the test according to cl. 3.10 |
| 10 | Mass fraction of the residue after evaporation, % | GOST 12162 cl. 3.11 | 0.02-0.04 | 0.02 |

Conclusion: Solid carbon dioxide complies with the requirements:

- GOST 12162-77 "Solid carbon dioxide. Technical Specifications".

Additional information:

Transportation and storage according to GOST 12162