

Joint Stock Company Angarsk Petrochemical Company Legal address: 665800, Irkutsk region, Angarsk, Pervyi industrial area, block 63, bld. 2 Place of manufacture: Irkutsk region, Angarsk city e-mail: delo@anhk.rosneft.ru. Tel. (3955) 578-404; 577-002

Certificate of Quality Management System ISO 9001:2015 № 19.2132.026 Certificate validity period: until 14.11.2022 ISOATS 29001:2010 No. 19.2140.026 Certificate validity period: until 14.11.2022

Testing Center - Quality Control Division Joint Stock Company Angarsk Petrochemical Company 665830, Irkutsk region, Angarsk, territory of JSC Angarsk Petrochemical Company e-mail: <u>of61@anhk.rosneft.ru</u>. Tel. (3955) 575-423

CERTIFICATE No. 28 Solid carbon dioxide

Certificate of Conformity No. ROSS RU.AH01 N00168 Valid until 04.04.2022

Designation of documents that establish requirements for products: GOST 12162-77 "Solid carbon dioxide. Specifications" OKPD 2 Code 20.11.12.110 Batch number: 28 Date of manufacture: 31.03.2021 Batch size (mass): 0.260 t Sampling site (according to GOST 12162-77): Pipeline No. 10902 Date of sampling: 31.03.2021 Test date: 31.03.2021

The certificate was issued on the basis of test results dated 31.03.2021 No. 1342-250102/PC



No.	Name of the indicator	Method method	Norm according to GOST 8050-85	Actual value
1	Overall view	GOST 12162-77 item 3.2	White blocks	White blocks
2	Mass fraction of carbon dioxide, %	GOST 12162-77 item 3.3	99.96-99.98	99.98
3	Mineral oil content	GOST 12162-77 item 3.4	Must withstand the tests according to item 3.4	withstands the test according to item 3.4
4	Hydrogen sulfide content	GOST 12162-77 item 3.5	Must withstand the tests according to item 3.5	withstands the test according to item 3.5
5	Hydrochloric acid content	GOST 12162-77 item 3.6	Must withstand the tests according to item 3.6	withstands the test according to item 3.6
6	The content of sulfurous and nitric acids and organic compounds (alcohols, esters, aldehydes and organic acids)	GOST 12162-77 item 3.7	Must withstand the tests according to item 3.7	withstands the test according to item 3.7
7	Ammonia and mono-ethanolamine content	GOST 12162-77 item 3.8	Must withstand the tests according to item 3.8	withstands the test according to item 3.8
8	Odor and taste	GOST 12162-77 item 3.9	Must withstand the tests according to item 3.9	withstands the test according to item 3.9
9	The content of aromatic hydrocarbons (including benzene)	GOST 12162-77 item 3.10	Must withstand the tests according to item 3.10	withstands the test according to item 3.10
10	Mass fraction of residue after evaporation, %	GOST 12162-77 item 3.11	0.02-0.04	0.02

<u>Conclusion:</u> Carbon dioxide solid <u>meets the requirements:</u> - GOST 12162-77 "Solid carbon dioxide. Specifications"

Additional Information: Transportation and storage - according to GOST 12162-77. The manufacturer of JSC Angarsk Petrochemical Company guarantees that the quality of solid carbon dioxide meets the requirements of GOST 12162-77, subject to the conditions of transportation.

Stamp here

Certificate issue date: 31.03.2021

Head of the installation shop 12/44 /signature/ A. A. Zaborovsky

Round stamp: / ANGARSK PETROCHEMICAL COMPANY JSC for certificates for products 3 /

Rectangular stamp: / Accepted for shipment by the Logistics Department of RN-TRANS JSC /





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Appendix to Certificate No. 28 dated 31.03.2021 Carbon dioxide solid GOST 12162-77 "Solid carbon dioxide. Specifications"

	No. Item No.	Designation of a legislative act, regulatory document or set of rules	Information required for the product description			
			Name of the indicator	Testing method	The actual value	
	1	Tax Code of the Russian Federation, Article 181, sub-item 11	The aggregate state at 20 °C and a pressure of 760 mm Hg.	-	gaseous	
			Processing name	-		

Head of the installation shop 12/44 /signature/ A. A. Zaborovsky