



BUREAU OF RESEARCH, TESTING AND CONSULTATION (BRTC)

Department of Chemistry

Chittagong University of Engineering and Technology (CUET)

Chattogram-4349, Bangladesh

TEST REPORT

Test report no. : CUET/CHEM/2024/262D

Sample tag no. : 613650

Name of section : Section-2

B/E no. & date : C-867329; Date: 08/05/2024



Date of report delivery : 16/05/2024

Sample received on : 15/05/2024

Sample: 01 Bag (Sealed condition)

Declared commodity name as per invoice/MSDS: **SODIUM SULPHATE ANHYDROUS 99% MIN**

Ref. file no. & date: ৫/কা:হা:চট/সেক-২/৪৯/চুয়েট/এক্সামিন/২০২৩/১১২৯;

তারিখ: ১৪/০৫/২০২৪ খ্রিঃ

TEST RESULTS

SN	Parameters	Descriptions
1	Method of test/analysis:	Physical, chemical and spectroscopic.
2	Physical properties	Colour : White Odour : Odourless Solubility : Soluble in water Melting point : > 350°C Physical state : Crystalline solid Specific gravity : > 1
3	Chemical and spectroscopic analysis	Sodium ion (Na ⁺) test: Positive (+ve) Sulphate ion (SO ₄ ²⁻) test : Positive (+ve) Chloride ion (Cl ⁻) test: Negative (-ve) Hydrate test : Negative (-ve)
4	Chemical name	Chemical name of the sample is Sodium Sulphate Anhydrous (Na₂SO₄) .
5	Probable uses of the product	<i>It is used in various industries like glass, pulp and paper, leather, soap, textile, detergent, battery, ceramic and chemical manufacturing.</i>
6	Note (if any)	Disodium sulphate, Sodium sulfate and sodium sulphate anhydrous are the same products having molecular formula Na₂SO₄ .

Responses to quarries:

1. The sample is sodium sulphate anhydrous.
2. It is not sodium chloride (NaCl).

Test conducted by

A. 16.5.24

Dr. Arup Kumer Roy
Associate Professor
Department of Chemistry
Chittagong University of Engineering & Technology
Chattogram- 4349, Bangladesh.

Checked by

M. 16.5.24

Dr. Md. Rezaul Karim
Professor
Department of Chemistry
Chittagong University of Engineering & Technology
Chattogram-4349, Bangladesh.

Countersigned by

R. 16.5.24

Prof. Dr. Ranjit Kumar Nath
Chairman, BRTC Chemistry &
Head, Department of Chemistry
CUET, Chattogram-4349, Bangladesh
Mobile: +88 01817750388