



# 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/2024/283X

Sample tag no. : 389306

Name of section : Section- 8(C)

B/E no. & date : C-1144704; Date: 13/06/2024



Date of report delivery : 24/06/2024

Sample received on : 23/06/2024

Sample: 01 Bag (Sealed Condition)

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

Ref. file no. & date: ০৫/কা:হা:চট/সেকশন-৮(সি)/চুয়েট/২০২৪/৫৪৭৬২(কাস);

তারিখ: ২৩/০৬/২০২৪ খ্রিঃ

### TEST RESULTS

SN	Parameters	Descriptions
1	Method of test/analysis:	Physical, chemical and spectroscopic.
2	Physical properties	Colour : <b>White</b> Odour : <b>Odourless</b> Solubility : <b>Soluble in water</b> Melting point : <b>&gt; 350°C</b> Physical state : <b>Crystalline solid</b> Specific gravity : <b>&gt; 1</b>
3	Chemical and spectroscopic analysis	Sodium ion (Na <sup>+</sup> ) test: <b>Positive (+ve)</b> Sulphate ion (SO <sub>4</sub> <sup>2-</sup> ) test : <b>Positive (+ve)</b> Chloride ion (Cl <sup>-</sup> ) test: <b>Negative (-ve)</b> Hydrate test : <b>Negative (-ve)</b>
4	Chemical name	Chemical name of the sample is <b>Sodium Sulphate Anhydrous (Na<sub>2</sub>SO<sub>4</sub>)</b> .
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 <b>anhydrous</b> are the same products having molecular formula <b>Na<sub>2</sub>SO<sub>4</sub></b> . Glauber's salt, also known as Mirabilite is a <b>hydrous</b> sodium sulphate having molecular formula <b>Na<sub>2</sub>SO<sub>4</sub>·10H<sub>2</sub>O</b> .

#### Responses to quarries:

1. The sample is sodium sulphate anhydrous.
2. It is neither Glauber salt nor table salt (NaCl).
3. Comment: N/A

Test conducted by

*Sanjida Mukut*  
24.06.2024

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Checked by

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24.6.2024

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Countersigned by

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Note: Any complain about sample / test report will not be acceptable after one month from the date of report delivery.