



# 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/2026/043C

Sample Tag No. : 728594

Name of Section : Section-8(D)

B/E No. & Date : C-432389, Date: 02/03/2026



Date of Report Delivery: 05/03/2026

Sample Received on : 04/03/2026

Sample: 01 Bag (Without Sealed Condition)

Declared Commodity Name as per Invoice/MSDS: SODIUM SULPHATE ANHYDROUS 99 PCT

Ref. file No. & Date: ০৫/কা:হা:চট্ট:/সেকশন-৮(ডি)/৪০৪/স্বকায়ন/২০২৬/১৬৮২৮ (কাস); তারিখ: ০৪/০৩/২০২৬ খ্রিঃ

### TEST RESULTS

SN	Parameters	Descriptions
1	Method of test/analysis:	Physical, chemical and spectroscopic.
2	Physical properties	Physical state : <b>Crystalline solid</b> Colour : <b>White</b> Odour : <b>Odourless</b> Solubility : <b>Soluble in water</b> Melting point : <b>&gt; 350°C</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>Trace amount</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 <b>Sodium sulphate 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 (Salt Sodium Chloride).
3. Comment: N/A

Test conducted by

05.03.26

**Md. Din Islam**  
Assistant Professor  
Department of Chemistry  
Chittagong University of Engineering & Technology  
Chattogram-4349, Bangladesh

Checked by

05.03.2026

**Dr. A. H. Rashadul Hossain**  
Professor  
Department of Chemistry  
Chittagong University of Engineering & Technology  
Chattogram-4349, Bangladesh.

Countersigned by

05.03.26

**Prof. Dr. Mst. Roksana Khatun**  
Chairman, BRTC Chemistry &  
Head, Department of Chemistry, CUET  
Chattogram-4349, Bangladesh  
Mobile: +88 01782 618134

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