

## SPECIFICATION

|                                                           |
|-----------------------------------------------------------|
| <b>Product Name:</b> Sodium Selenite BP Grade             |
| <b>Chemical Formula:</b> Na <sub>2</sub> SeO <sub>3</sub> |
| <b>CAS Number:</b> 10102-18-8                             |
| <b>Molecular Weight:</b> 172.94 g/mol                     |
| <b>Appearance:</b> White or almost white powder           |
| <b>Odor:</b> Odorless                                     |

## Chemical Composition

| Parameter              | Unit | Typical Value                              | Specifications Min./Max.                                                                                                                                                                                                              |
|------------------------|------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identification         | -    | Complies the test<br><br>Complies the test | A : Dissolve 50 mg in 5 ml of 7 M Hydrochloric Acid. add 2 ml of 0.1 M Sodium thiosulfate and heat to boiling. A reddish orange precipitate is produced.<br>B: 1 ml of solution S Yield the reaction Characteristics of sodium salts. |
| Clarity of solution    | -    | Complies the test                          | Soln. S is not more opalescent than Reference Suspension.                                                                                                                                                                             |
| pH                     | -    | 10.08                                      | 9.8 to 10.8                                                                                                                                                                                                                           |
| Alkalinity             | -    | Complies the test                          | Not more than 0.25 ml of 1M Hcl is used. Vs is required to change the colour of Solution From dark blue to very pale blue.                                                                                                            |
| Chlorides              | PPM  | <50 PPM                                    | Max. 50 PPM                                                                                                                                                                                                                           |
| Sulfates and Selenates | PPM  | Nil                                        | NMT 50 PPM                                                                                                                                                                                                                            |
| Iron                   | PPM  | <50 PPM                                    | Max. 50 PPM                                                                                                                                                                                                                           |
| Loss on drying @ 1300C | %    | 0.24%                                      | NMT 0.5 %                                                                                                                                                                                                                             |
| Se (On dry basis)      | %    | 45.58 %                                    | NLT 45.0 %                                                                                                                                                                                                                            |

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|                      |   |         |                 |
|----------------------|---|---------|-----------------|
| Assay (On dry basis) | % | 99.70 % | 98.5% to 101.5% |
|----------------------|---|---------|-----------------|

### **Physical Properties**

- Solubility: Soluble in water. Insoluble in ethanol. Insoluble in methanol. Insoluble in acetone. Insoluble in ether. Insoluble in chloroform.

### **Shelf Life & Storage**

- Shelf Life: 3 years from date of manufacture under recommended storage.  
- Storage Conditions: Store in a tightly closed, light-resistant, moisture-resistant container in a cool, dry, and well-ventilated place, protected from moisture, heat, direct sunlight, and contamination.

### **Applications**

- Use: Widely used in pharmaceutical, nutraceutical, and dietary supplement formulations. It provides selenium, an essential trace mineral required for normal physiological functions.  
- Dosage: Depends on Age, Nutritional status, Selenium deficiency, Medical condition, Product formulation, Regulatory requirements.

### **Packaging**

- Standard Packing: 25 Kgs HDPE drum or as per customer requirement.  
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

\* Specifications are based on the manufacturer's provided specifications.