**Scapex Exports Pvt. Ltd.**
830, 8th Floor, Sun Gravitas, Times of India Road,
Shyamal, Ahmedabad 380015, Gujarat, India
+91 9925522674 · info@scapexexports.com
CIN U46909GJ2025PTC164345

**CERTIFICATE OF ANALYSIS** Standard product specification

# Barium Oxide

CAS 1304-28-5 · BaO · ≥98% Technical

STRUCTURAL FORMULA

## 1. PRODUCT IDENTITY

| | |
|---|---|
| Product name | Barium Oxide |
| C.A.S. number | 1304-28-5 |
| Molecular formula | BaO |
| Molecular weight | 153.33 g/mol |
| Grade / standard | ≥98% Technical |
| Description | White to yellowish powder |
| Product group | Barium Compounds |
| Category | Inorganic Salts & Compounds |
| Country of origin | India |
| Packing | Bags, drums, carboys, IBC or ISO tank as applicable — customer-specified packing available |
| Storage | Cool, dry, well-ventilated place in tightly closed original packing |

## 2. ANALYTICAL SPECIFICATION

| S. NO. | TEST PARAMETER | SPECIFICATION | TYPICAL RESULT | METHOD |
|---|---|---|---|---|
| 1 | Description | White to yellowish powder | Complies | Visual |
| 2 | Identification | Conforms to the structure of the substance | Complies | FTIR / Chemical test |
| 3 | Solubility | As per specification | Complies | Visual / Monograph |
| 4 | Assay | Not less than 98.0 % w/w | 98.35 | Titrimetry / Instrumental |
| 5 | Matter Insoluble in Water | Not more than 0.05 % w/w | 0.019 | Gravimetry |

| | | | | |
|---|---|---|---|---|
| 6 | pH (5 % w/v aqueous solution) | As per specification | 6.1 | Potentiometry |
| 7 | Chloride (as Cl) | Not more than 0.01 % w/w | 0.0028 | Turbidimetry / IC |
| 8 | Sulphate (as SO4) | Not more than 0.02 % w/w | 0.0058 | Turbidimetry / IC |
| 9 | Iron (as Fe) | Not more than 20 ppm | 2.4 ppm | ICP-OES / AAS |
| 10 | Heavy Metals (as Pb) | Not more than 10 ppm | Less than 5 ppm | ICP-OES |
| 11 | Moisture | Not more than 1.0 % w/w | 0.45 | Karl Fischer / Gravimetry |

## 3. DECLARATION

This document sets out the standard specification for Barium Oxide and applies to all consignments of this product and grade supplied by Scapex Exports Pvt. Ltd. It is not a lot-specific release document; a lot-specific certificate carrying the analysis of the material actually shipped is issued with, and travels with, each consignment. Scapex Exports supplies against customer-specified assay limits and pharmacopoeial standards — send your specification sheet and we confirm compliance in writing before the order is accepted.

SCAPEX EXPORTS PVT. LTD.
SCAPEX
QUALITY ASSURED
AHMEDABAD · GUJARAT · INDIA

Scapex Exports Pvt. Ltd. · Ahmedabad, Gujarat, India · info@scapexexports.com · +91 9925522674 — system-generated document, valid without physical signature.