Cosmo Chemistry
GST : 24AARFC0033C1Z2

# Technical Data Sheet

**PRODUCT NAME : BARIUM CARBONATE**

**Description**

Barium Carbonate is manufactured from natural Barium Sulphate (Barite) by reduction with pet coke and following precipitation with Carbon Dioxide.

**Formula:** $BaCO_3$

**Delivery form:** Powder

**Chemical Class:** Alkali

**CAS-No**.: 513-77-9

**EC No.:** 208-167-3

**Specified Technical Data**

| TYPE | UNIT | AGK | HRP | LSP |
|---|---|---|---|---|
| Purity as $BaCO_3$ (HCl titration) | Wt% | ≥ 99.00 | ≥ 98.80 | ≥ 99.20 |
| Total Sulphur as $SO_3$ | Wt% | ≤ 0.27 | ≤ 0.30 | ≤ 0.25 |
| Insoluble matter in HCl | Wt% | ≤ 0.30 | ≤ 0.30 | ≤ 0.30 |
| Iron as $Fe_2O_3$ | ppm | ≤ 30 | ≤ 30 | ≤ 30 |
| Moisture | Wt% | ≤ 0.15 | ≤ 0.15 | ≤ 0.15 |
| Bulk Density Tapped | Kg/lit | ≤ 1.3 | ≤ 1.1 | ≤ 2.0 |
| Sieve residue in 45 micron (+325BSS) | Wt% | ≤ 5.0 | ≤ 10.0 | ≤ 1.0 |
| Reaction Efficiency | Wt% | N.A | 85 | N.A |

**Particle Size Distribution**

| TYPE | D50 | METHOD |
|---|---|---|
| LSP | 7 -9 µm | Malvern (Wet) |
| AGK | 1.85 - 2.7 µm | Malvern (Wet) |
| HRP | 1.8 -2.3 µm | Malvern (Wet) |

Average values of 100 samples using Laser Scattering Particle Size Distribution analyzer.

**Packaging**

- 25 Kg Paper Bags
- 25 Kg HDPE Bags
- 1000 Kg Bulk HDPE Bags

## Characteristics

Insoluble in water and organic solvents.
Reacts with acid releasing Carbon Dioxide.
It is non-Dangerous in terms of being Non-flammable, stable up to a temperature of 1100°C and decomposes into its oxide with release of Carbon Dioxide

## Product Information

**General Storage Conditions:**
Store in a cool, dry, well-ventilated, locked store room away from incompatible materials. Use ventilation to keep airborne concentrations below exposure limits.

**Incompatible Products:** There is no additional information.
**Shelf Life:** 36 Months.

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## Transport and Storage

**Classification:** This product is classified as Non-Dangerous Cargo.

**Precautions:**
GHS07 -Respiratory sensitization - Category I
H302 -Harmful if Swallowed
P264 - Wash thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301+P312 - IF SWALLOWED: Call a POISON CENTER/Doctor
P330 -Rinse mouth
P501 -Dispose of contents/container to industrial combustion plant

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## Applications

- Manufacture of electro-ceramic materials.
- Manufacture of glazes, frits and enamels.
- Use in welding electrode coating.
- Glass manufacturing processes as purifying agent for uniformity in glass melt.
- Caustic lye brine purification process.
- Brick manufacturing.
- Manufacture of other Barium Chemicals like Chloride, Peroxide, Nitrate etc.
- For special Glass manufacturing.

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