

# Bismuth Oxide, varistor grade

30.07.07

<b>Nomenclature</b>	Bismuth Oxide Bismuthous Oxide Bismuth Yellow Bismuth Sesquioxide																																
<b>Formula</b>	Bi <sub>2</sub> O <sub>3</sub>																																
<b>CAS Number</b>	1304-76-3																																
<b>Specifications</b>	<table><tr><td>Bismuth Oxide (Bi<sub>2</sub>O<sub>3</sub>)</td><td>min. 99.99 % (dry basis)</td></tr><tr><td>Bismuth (Bi)</td><td>89.5 - 89.9 %</td></tr><tr><td>Loss on drying</td><td>max. 0.2 %</td></tr><tr><td>Sodium (Na)</td><td>max. 50 ppm</td></tr><tr><td>Aluminium (Al)</td><td>max. 10 ppm</td></tr><tr><td>Calcium (Ca)</td><td>max. 10 ppm</td></tr><tr><td>Cadmium (Cd)</td><td>max. 5 ppm</td></tr><tr><td>Copper (Cu)</td><td>max. 5 ppm</td></tr><tr><td>Iron (Fe)</td><td>max. 5 ppm</td></tr><tr><td>Lead (Pb)</td><td>max. 5 ppm</td></tr><tr><td>Magnesium (Mg)</td><td>max. 5 ppm</td></tr><tr><td>Nickel (Ni)</td><td>max. 5 ppm</td></tr><tr><td>Silver (Ag)</td><td>max. 5 ppm</td></tr><tr><td>Chloride (Cl)</td><td>max. 10 ppm</td></tr><tr><td>Sulphate (SO<sub>4</sub>)</td><td>max. 10 ppm</td></tr><tr><td>Total metallic impurities</td><td>max. 100 ppm</td></tr></table>	Bismuth Oxide (Bi <sub>2</sub> O <sub>3</sub> )	min. 99.99 % (dry basis)	Bismuth (Bi)	89.5 - 89.9 %	Loss on drying	max. 0.2 %	Sodium (Na)	max. 50 ppm	Aluminium (Al)	max. 10 ppm	Calcium (Ca)	max. 10 ppm	Cadmium (Cd)	max. 5 ppm	Copper (Cu)	max. 5 ppm	Iron (Fe)	max. 5 ppm	Lead (Pb)	max. 5 ppm	Magnesium (Mg)	max. 5 ppm	Nickel (Ni)	max. 5 ppm	Silver (Ag)	max. 5 ppm	Chloride (Cl)	max. 10 ppm	Sulphate (SO <sub>4</sub> )	max. 10 ppm	Total metallic impurities	max. 100 ppm
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If required, lower levels of impurity can be obtained

**Typical Properties** Insoluble in water. Soluble in mineral acids.

Bulk density-Tapped: 3 g/cm<sup>3</sup>

Density: 8.9 g/cm<sup>3</sup>

Molecular Weight: 465.96

Average Particle Size: 4 microns maximum

**Container** 25 or 50 kg net in Fiber drum  
50 kg net in Plastic drum

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