



# Product Data Sheet

## Bismuth Oxide – Varistor Grade

Nomenclature:	Bismuth oxide Trioxyde de dibismuth Dibismuth trioxide	Bismuthous oxide Bismuth trioxide Bismuth sesquioxide
Formula:	Bi <sub>2</sub> O <sub>3</sub>	
CAS Number:	1304-76-3	
Inventory status:	TSCA EINECS (No.: 215-134-7)	EPA ENCS (No.: 1-98)
		DSL AICS

### Chemical Data:

	Specification	Typical value
Bismuth Oxide	min. 99.99 %	
Total metallic impurities	max. 0.01 %	
Bismuth	89.3 – 90.1 %	89.7 %
Cl, SO <sub>4</sub>	max. 10 ppm	< 10 ppm
Na	max. 20 ppm	10 ppm
Ag, Ca, Fe, Pb	max. 10 ppm	5 ppm
Al, Cu, Cd, Mg, Ni	max. 5 ppm	2 ppm
Loss on drying	max. 0.2 %	< 0.1 %

### Morphological and Physical Data:

	Specification	Typical value
Particle size: d50 (Helos/Rodos)		3.7 μm
Appearance		yellow powder
Tapped density		2.5 g/cm <sup>3</sup>
Density (theor.)	8.5 - 9.4 g/cm <sup>3</sup>	
Molecular weight	465.96	

### Regulatory Information:

RoHS	The material complies with RoHS/WEEE/ELV-regulation: Pb, Hg, Cr(VI), PBB, PBDE: each < 1000 ppm Cd: < 100 ppm
REACH	Product is registered acc. to REACH-regulation

### Particle Size Distribution:

