



High Purity Elements & Compounds

□ Bismuth

Bismuth is odorless, silver or reddish color metal. High purity bismuth of 99.999% and 99.9999% purity (5N 6N) is primarily used in the manufacturing of compound semiconductor materials, high purity alloys, thermoelectric converting elements, electronic cooling elements, and liquid carrier for the cooling in the atomic reactor etc.



Bismuth	Bi
Atomic No.	83
Atomic Weight	208.98
Density	9.8gm/cc
Melting Point	1560° C
Boiling Point	271.3° C
CAS No.	7440-69-9
H.S Code	8106.001091

No.	Item	Standard Specification		
1	Bismuth ≥%	99.999	99.9999	
2	Impurity PPM _{wt} Max Each	Cd	0.20	0.10
		Au	0.20	-
		Ni	0.20	0.05
		Zn/Al/Mg	0.50	0.10
		Pb	0.50	0.10
		Fe/ /As	0.50	0.10
		Sn/Cr	0.50	-
3	Size	65x10x15mm/110g, 47x10x97/ 450g, Chunk 1000g		
		0.5kg, 1kg in sealed plastic bag, carton box outside.		
4	Packing	0.5kg, 1kg in sealed plastic bag, carton box outside.		

□ Bismuth Oxide

Bismuth Oxide (Bismuth Trioxide) , with purity of 99.9%, 99.99%, 99.999% and 99.9999% (3N 4N 5N 6N) is mainly for the manufacturing of electronic element, varistor and lighting arrester, capacitor etc.



No.	Item	Standard Specification				
1	Bi ₂ O ₃ ≥%	99.9	99.99	99.999	99.9999	
2	Impurity PCT or PPM _{wt} Max Each	Element	PCT Max	PPM Max	PPM Max	PPM Max
		Pb	0.002	10	0.5	0.06
		Cu	0.002	10	1.0	0.06
		K	0.001	-	-	-
		Mg	0.004	5.0	0.5	0.06
		Na	0.006	-	-	0.04
		Ca	0.005	5.0	1.0	0.05
		Fe	0.005	10	0.5	0.10
		Mn	-	5.0	0.5	0.03
		Cd/Zn/Sb	-	5.0	-	-
		Ni	-	5.0	0.5	0.10
		Co	-	5.0	0.5	-
		Ag	-	-	1.0	0.01
Cr	-	-	0.5	0.05		
Al	-	-	-	0.03		
3	Size	2-4.5um	-100mesh	-100mesh	-100mesh	
4	Packing	25kg in sealed plastic bag		1kg in polyethylene bottle		