



# SAFETY DATA SHEET

MATERION

## 1. Product and company identification

**Product name** Bismuth Antimony Products  
**Manufacturer/Supplier** Materion Advanced Materials Group  
**Address** 42 Mt. Ebo Road South  
Brewster, NY 10509  
United States  
**Telephone** Supplier Phone 1+845.279.0900  
**e-mail** Not available.  
**Contact person**  
**Emergency telephone number** Chemtrec 1+703.527.3887

### Recommended use and Limitations on use

**Recommended use** Not available.

## 2. Hazards identification

### GHS classification

**Physical hazards** Not classified.  
**Health hazards** Acute toxicity, oral Category 5  
Acute toxicity, inhalation Category 4  
Skin corrosion/irritation Category 1  
Serious eye damage/eye irritation Category 1  
Specific target organ toxicity following single exposure Category 1 (kidney, nervous system, osteoarticular)  
Specific target organ toxicity following repeated exposure Category 1 (kidney, nervous system, osteoarticular)  
**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 3  
Hazardous to the aquatic environment, long-term hazard Category 3

### Label elements

**Symbols** None.  
**Signal word** None.  
**Hazard statement** None.

## 3. Composition/information on ingredients

**Substance or mixture** Mixture

Chemical property	Synonyms	CAS Number	Concentration (%)
Bismuth	Bismuth	7440-69-9	85 - 95
Antimony		7440-36-0	5 - < 15

## 4. First aid measures

**Inhalation** Not available.  
**Skin contact** Not available.  
**Eye contact** Not available.  
**Ingestion** Not available.  
**Potential delayed effects** Not available.  
**Personal protection for first-aid responders** Not available.  
**Notes to physician** Not available.

## 5. Fire-fighting measures

**Extinguishing media** Not available.

<b>Extinguishing media to avoid</b>	None.
<b>HAZCHEM Code Number</b>	None.
<b>Specific hazards during fire fighting</b>	None.
<b>Special fire fighting procedures</b>	Not available.
<b>Protection of fire-fighters</b>	Not available.
<b>Hazards from combustion products</b>	None.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Not available.
<b>Environmental precautions</b>	Not available.
<b>Spill cleanup methods</b>	Not available.

## 7. Handling and storage

### Handling

<b>Precautions</b>	Not available.
<b>Safe handling advice</b>	Not available.
<b>Prevention of fire and explosion</b>	Not available.

### Storage

<b>Suitable storage conditions</b>	Not available.
<b>Incompatible materials</b>	Not available.

## 8. Exposure controls/personal protection

### Exposure limits

#### New Zealand. WES. (Workplace Exposure Standards)

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0.5 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0.5 mg/m <sup>3</sup>

#### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0.5 mg/m <sup>3</sup>

#### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0.5 mg/m <sup>3</sup>

#### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0.5 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### Engineering controls

#### Personal protective equipment

<b>Respiratory protection</b>	Not available.
<b>Skin protection</b>	Not available.
<b>Eye/face protection</b>	Not available.
<b>Radioactive or thermal hazards</b>	Not available.
<b>Hygiene measures</b>	Not available.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Not available.
<b>Colour</b>	Not available.
<b>Odour</b>	Not applicable.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	271 °C (519.8 °F) estimated
<b>Boiling point, initial boiling point, and boiling range</b>	1564 °C (2847.2 °F) estimated
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	0.00001 hPa estimated
<b>Vapour density</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Relative density</b>	Not available.
<b>Density</b>	9.47 g/cm3 estimated
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Other data</b>	
<b>Specific gravity</b>	9.47 estimated

## 10. Stability and reactivity

<b>Stability</b>	None.
<b>Conditions to avoid</b>	None.
<b>Incompatible materials</b>	None.
<b>Hazardous decomposition products</b>	None.
<b>Possibility of hazardous reactions</b>	None.

## 11. Toxicological information

<b>Acute toxicity</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Routes of exposure</b>	Not available.
<b>Symptoms</b>	Not available.
<b>Skin corrosion/irritation</b>	Not available.
<b>Serious eye damage/eye irritation</b>	Not available.
<b>Skin sensitiser</b>	Not available.
<b>Chronic effects</b>	Not available.
<b>Relevant negative data</b>	Not available.

## 12. Ecological information

### Ecotoxicological data

Product		Species	Test results
Bismuth Antimony Products			
<b>Aquatic</b>			
Fish	LC50	Fish	62 mg/l, 96 hours estimated
Components		Species	Test results
Antimony (CAS 7440-36-0)			
<b>Aquatic</b>			
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	6.2 - 8.3 mg/l, 96 hours

<b>Ecotoxicity</b>	Not available.
<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulation</b>	Not available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>Mobility</b>	Not available.
<b>Other hazardous effects</b>	Not available.

## 13. Disposal considerations

<b>Disposal methods/information</b>	Not available.
<b>Special precautions</b>	Not available.

## 14. Transport information

<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not available.

## 15. Regulatory information

### Applicable regulations

#### New Zealand Inventory of Chemicals (NZIoC): Registration status

Antimony (CAS 7440-36-0)	HSNO Approved
Bismuth (CAS 7440-69-9)	May be used as a single component chemical under an appropriate group standard

## 16. Other information

<b>References</b>	Not available.
<b>Issued by</b>	Not available.
<b>Prepared by</b>	Not available.
<b>Issue date</b>	18-June-2015