



SAFETY DATA SHEET

MATERION

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation	Bismuth Antimony Products	
Version No.	01	
Issue date	18-June-2015	
CAS #	Alloy	
Manufacturer information	Materion Advanced Materials Group 42 Mt. Ebo Road South Brewster, NY 10509	
	United States	
	Supplier Phone	1+845.279.0900
	Chemtrec	1+703.527.3887

2. HAZARDS IDENTIFICATION

Classification	F;R11
Physical hazards	Highly flammable.
Health hazards	Not classified as a health hazard.
Environmental hazards	Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Bismuth	7440-69-9	85 - 95	231-177-4	F;R11
Antimony	7440-36-0	5 - 15	231-146-5	

4. FIRST-AID MEASURES

5. FIRE-FIGHTING MEASURES

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m ³

Turkey. MAK (Ordinance No. 1475 on Precautions Required in Workplaces Working with Flammable, Explosive, Dangerous and Harmful Substances, Annexes 1-3 (1973))

Components	Type	Value
Antimony (CAS 7440-36-0)	MAK	0,5 mg/m ³

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

Recommended monitoring procedures

Additional exposure data Not available.

Personal protective equipment

Skin and body protection Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Solid.
Form	Not available.
Colour	Not available.

Odour	Not applicable.
Odour threshold	Not available.
pH	Not available.
Boiling point	1564 °C (2847,2 °F) estimated
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapour pressure	0,00001 hPa estimated
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Viscosity	Not available.
Vapour density	Not available.
Evaporation rate	Not available.
Melting point/freezing point	271 °C (519,8 °F) estimated
Auto-ignition temperature	Not applicable.
VOC	Not available.
Other data	
Density	9,47 g/cm3 estimated
Specific gravity	9,47 estimated

10. STABILITY AND REACTIVITY

Conditions to avoid	Not available.
Hazardous decomposition products	Not available.

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

Ecotoxicological data

Product		Species	Test results
Bismuth Antimony Products			
Aquatic			
Fish	LC50	Fish	62 mg/l, 96 hours estimated
Components		Species	Test results
Antimony (CAS 7440-36-0)			
Aquatic			
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	6,2 - 8,3 mg/l, 96 hours

13. DISPOSAL CONSIDERATIONS

14. TRANSPORT INFORMATION

ADR

UN number	3178
UN proper shipping name	Flammable solid, inorganic, n.o.s. (Bismuth)
Transport hazard class(es)	
Class	4.1
Subsidiary risk	-
Label(s)	4.1
Hazard No.(ADR)	40
Tunnel restriction code	E
Packing group	III
Environmental hazards	No.

Special precautions for user Not available.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

ADR



15. REGULATORY INFORMATION

Labeling

Contains Antimony, Bismuth

Symbol(s)



Highly flammable

R-phrases(s) R11 Highly flammable.

S-phrases(s) S7/9 Keep container tightly closed and in a well-ventilated place.
S16 Keep away from sources of ignition - No smoking.
S60 This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3 R11 Highly flammable.