



# SAFETY DATA SHEET

**MATERION**

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Name of the substance** Antimony. pieces  
**Identification number** 051-003-00-9 (Index number)  
**Synonyms** None.  
**Document number** 1BJ  
**Materion Code** 1BJ  
**Issue date** 10-November-2017  
**Version number** 02  
**Revision date** 09-January-2018  
**Supersedes date** 10-November-2017

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Not available.  
**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

**Company name** Materion Advanced Chemicals Inc.  
**Address** 407 N. 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States  
**Division** Milwaukee  
**Telephone** 414.212.0257  
**e-mail** advancedmaterials@materion.com  
**Contact person** Noreen Atkinson

### 1.4. Emergency telephone number

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Environmental hazards

Hazardous to the aquatic environment, Category 2 H411 - Toxic to aquatic life with long-term aquatic hazard long lasting effects.

**Hazard summary** Dangerous for the environment if discharged into watercourses.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Antimony

##### Hazard pictograms



**Signal word** Warning

##### Hazard statements

H302 Harmful if swallowed.  
H332 Harmful if inhaled.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

##### Prevention

P261 Avoid breathing dust/fume.

P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.

**Response**

P330 Rinse mouth.  
P391 Collect spillage.

**Storage**

Store away from incompatible materials.

**Disposal**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental label information**

None.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

**General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Antimony	90 - 100	7440-36-0 231-146-5	-	051-003-00-9	
<b>Classification:</b>	Acute Tox. 4;H302, Acute Tox. 4;H332, Aquatic Chronic 2;H411				

**List of abbreviations and symbols that may be used above**

CLP: Regulation No. 1272/2008.  
DSD: Directive 67/548/EEC.  
M: M-factor  
vPvB: very persistent and very bioaccumulative substance.  
PBT: persistent, bioaccumulative and toxic substance.  
#: This substance has been assigned Community workplace exposure limit(s).

**SECTION 4: First aid measures**

**General information**

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**4.1. Description of first aid measures**

**Inhalation** Call a POISON CENTRE or doctor/physician if you feel unwell.  
**Skin contact** Rinse skin with water/shower. Get medical attention if irritation develops and persists.  
**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Ingestion** Rinse mouth. IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed**

Dizziness. Headache. Nausea, vomiting. Diarrhoea. Coughing.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed.

**SECTION 5: Firefighting measures**

**General fire hazards**

No unusual fire or explosion hazards noted.

**5.1. Extinguishing media**

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media** None known.

**5.2. Special hazards arising from the substance or mixture**

During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Wear suitable protective equipment.

**Special firefighting procedures** Use water spray to cool unopened containers. Water runoff can cause environmental damage.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

### 6.2. Environmental precautions

Avoid release to the environment. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

### 6.3. Methods and material for containment and cleaning up

The product is immiscible with water and will spread on the water surface. Collect spillage. Prevent product from entering drains. Following product recovery, flush area with water.

### 6.4. Reference to other sections

For personal protection, see section 8. For personal protection, see section 8 of the SDS. For waste disposal, see section 13. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. Observe good industrial hygiene practices.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

### 7.3. Specific end use(s)

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	MAK	0,5 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	5 mg/m <sup>3</sup>	Inhalable fraction.

##### Belgium. Exposure Limit Values.

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

##### Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

##### Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Material	Type	Value
Antimony (CAS 7440-36-0)	MAC	0,5 mg/m <sup>3</sup>

##### Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

##### Czech Republic. OELs. Government Decree 361

Material	Type	Value
Antimony (CAS 7440-36-0)	Ceiling	1,5 mg/m <sup>3</sup>
	TWA	0,5 mg/m <sup>3</sup>

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Finland. Workplace Exposure Limits**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Material	Type	Value
Antimony (CAS 7440-36-0)	VME	0,5 mg/m <sup>3</sup>

**Greece. OELs (Decree No. 90/1999, as amended)**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Material	Type	Value
Antimony (CAS 7440-36-0)	STEL	2 mg/m <sup>3</sup>
	TWA	0,5 mg/m <sup>3</sup>

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>	Dust.

**Ireland. Occupational Exposure Limits**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Italy. Occupational Exposure Limits**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	STEL	0,5 mg/m <sup>3</sup>	Dust.
	TWA	0,2 mg/m <sup>3</sup>	Dust.

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Netherlands. OELs (binding)**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Norway. Administrative Norms for Contaminants in the Workplace**

Material	Type	Value
Antimony (CAS 7440-36-0)	TLV	0,5 mg/m <sup>3</sup>

**Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Material	Type	Value
Antimony (CAS 7440-36-0)	STEL	0,5 mg/m <sup>3</sup>
	TWA	0,2 mg/m <sup>3</sup>

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>	Inhalable fraction.

**Spain. Occupational Exposure Limits**

Material	Type	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>

**Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)**

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	TWA	0,25 mg/m <sup>3</sup>	Inhalable dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Material	Type	Value	Form
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m <sup>3</sup>	Inhalable dust.

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

Material	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).

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no effect levels (DNELs)**

Not available.

**Predicted no effect concentrations (PNECs)**

Not available.

**8.2. Exposure controls****Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****General information**

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****- Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**- Other**

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**

Contain spills and prevent releases and observe national regulations on emissions. Inform appropriate managerial or supervisory personnel of all environmental releases.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Powder.
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Colour</b>	Not available.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	630 °C (1166 °F)

<b>Initial boiling point and boiling range</b>	1635 °C (2975 °F)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	< 0,0000001 kPa at 25 °C
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

## 9.2. Other information

<b>Density</b>	6,68 g/cm <sup>3</sup> estimated at 25 °C
<b>Molecular formula</b>	Sb
<b>Molecular weight</b>	121,75 g/mol
<b>Specific gravity</b>	6,68 at 25 °C

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	None known.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Acids. Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	No dangerous reaction known under conditions of normal use.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms** Headache. Dizziness. Nausea, vomiting. Diarrhoea. Coughing.

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	Harmful if inhaled. Harmful if swallowed.
<b>Skin corrosion/irritation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Serious eye damage/eye irritation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.

**Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)**

Not listed.

<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** Toxic to aquatic life with long lasting effects.

Product	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

\* Estimates for product may be based on additional component data not shown.

**12.2. Persistence and degradability** No data is available on the degradability of this product.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient n-octanol/water (log Kow)** Not available.

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** Not available.

**12.6. Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 12.7. Additional information

#### Estonia Dangerous substances in soil Data

Antimony (CAS 7440-36-0)	Antimony (Sb) 10 mg/kg Antimony (Sb) 100 mg/kg Antimony (Sb) 20 mg/kg
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

14.1. - 14.6.: Not regulated as dangerous goods.

### RID

14.1. - 14.6.: Not regulated as dangerous goods.

### ADN

14.1. - 14.6.: Not regulated as dangerous goods.

### IATA

14.1. - 14.6.: Not regulated as dangerous goods.

### IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

#### Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

#### National regulations

Follow national regulation for work with chemical agents.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

#### List of abbreviations

Not available.

#### Information on evaluation method leading to the classification of mixture

Not applicable.



**Disclaimer**

Materion Advanced Chemicals Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This document has been prepared using data from sources considered to be technically reliable and the information is believed to be correct. Materion makes no warranties, expressed or implied, as to the accuracy of the information contained herein. Materion cannot anticipate all conditions under which this information and its products may be used and the actual conditions of use are beyond its control. The user is responsible to evaluate all available information when using this product for any particular use and to comply with all Federal, State, Provincial and Local laws, statutes and regulations.