



# SAFETY DATA SHEET

**MATERION**

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

### 1.1. Product identifier

<b>Name of the substance</b>	Nickel Antimonide (NiSb)
<b>Identification number</b>	051-003-00-9 (Index number)
<b>Synonyms</b>	None.
<b>Document number</b>	1YJ
<b>Materion Code</b>	1YJ
<b>Issue date</b>	25-April-2016
<b>Version number</b>	02
<b>Revision date</b>	15-January-2018
<b>Supersedes date</b>	25-April-2016

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

<b>Identified uses</b>	Not available.
<b>Uses advised against</b>	None known.

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

#### Supplier

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

### 1.4. Emergency telephone number

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

##### Health hazards

Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 4

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2
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**Hazard summary** Not available.

### 2.2. Label elements

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

<b>Contains:</b>	Nickel Antimonide (NiSb)
<b>Hazard pictograms</b>	None.
<b>Signal word</b>	None.
<b>Hazard statements</b>	The substance does not meet the criteria for classification.

#### Precautionary statements

<b>Prevention</b>	Not available.
<b>Response</b>	Not available.
<b>Storage</b>	Not available.
<b>Disposal</b>	Not available.

**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
Nickel Antimonide (NiSb)	100	12035-52-8 234-827-5	-	051-003-00-9	
<b>Classification:</b>	-				1,A

## SECTION 4: First aid measures

General information Not available.

### 4.1. Description of first aid measures

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

## SECTION 5: Firefighting measures

General fire hazards Not available.

### 5.1. Extinguishing media

Suitable extinguishing media Not available.

Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture Not available.

### 5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

## SECTION 6: Accidental release measures

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

For non-emergency personnel Not available.

For emergency responders Not available.

6.2. Environmental precautions Not available.

6.3. Methods and material for containment and cleaning up Not available.

6.4. Reference to other sections Not available.

## SECTION 7: Handling and storage

7.1. Precautions for safe handling Not available.

7.2. Conditions for safe storage, including any incompatibilities Not available.

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
Nickel Antimonide (NiSb) (CAS 12035-52-8)	MAK	0,5 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	1,5 mg/m <sup>3</sup>	Inhalable fraction.

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

Material	Type	Value
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,5 mg/m <sup>3</sup>

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

Material	Type	Value
Nickel Antimonide (NiSb) (CAS 12035-52-8)	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
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,1 mg/m <sup>3</sup>

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

Material	Type	Value
Nickel Antimonide (NiSb) (CAS 12035-52-8)	Ceiling	0,1 mg/m <sup>3</sup>
	STEL	2 mg/m <sup>3</sup>
	TWA	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
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,5 mg/m <sup>3</sup>

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

Material	Type	Value
Nickel Antimonide (NiSb) (CAS 12035-52-8)	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
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,5 mg/m <sup>3</sup>	Inhalable fraction.

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

Material	Type	Value	Form
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,25 mg/m <sup>3</sup>	Inhalable dust.

##### Switzerland. SUVA Grenzwerte am Arbeitsplatz

Material	Type	Value	Form
Nickel Antimonide (NiSb) (CAS 12035-52-8)	TWA	0,05 mg/m <sup>3</sup>	Inhalable dust.

#### Biological limit values

##### Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Material	Value	Determinant	Specimen	Sampling time
Nickel Antimonide (NiSb) (CAS 12035-52-8)	40 µg/l	Nickel	Urine	*

\* - For sampling details, please see the source document.

<b>Recommended monitoring procedures</b>	Not available.
<b>Derived no effect levels (DNELs)</b>	Not available.
<b>Predicted no effect concentrations (PNECs)</b>	Not available.

## 8.2. Exposure controls

<b>Appropriate engineering controls</b>	Not available.
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### Individual protection measures, such as personal protective equipment

<b>General information</b>	Not available.
<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
- Hand protection	Not available.
- Other	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.
<b>Hygiene measures</b>	Not available.
<b>Environmental exposure controls</b>	Not available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Not available.
<b>Colour</b>	Not available.

**Odour** Not available.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Vapour pressure** 2,44 kPa at 25 °C

**Vapour density** Not available.

**Relative density** Not available.

#### Solubility(ies)

**Solubility (water)** Not available.

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

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Explosive properties** Not available.

**Oxidising properties** Not available.

### 9.2. Other information

<b>Molecular formula</b>	Ni.Sb
<b>Molecular weight</b>	180,45 g/mol

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Not available.
<b>10.2. Chemical stability</b>	Not available.
<b>10.3. Possibility of hazardous reactions</b>	Not available.
<b>10.4. Conditions to avoid</b>	Not available.
<b>10.5. Incompatible materials</b>	Not available.
<b>10.6. Hazardous decomposition products</b>	Not available.

## SECTION 11: Toxicological information

**General information** Not available.

### Information on likely routes of exposure

**Inhalation** Not available.

**Skin contact** Not available.

**Eye contact** Not available.

**Ingestion** Not available.

**Symptoms** Not available.

### 11.1. Information on toxicological effects

**Acute toxicity** No data available.

**Skin corrosion/irritation** Not available.

**Serious eye damage/eye irritation** Not available.

**Respiratory sensitisation** Not available.

**Skin sensitisation** Not available.

**Germ cell mutagenicity** Not available.

### Carcinogenicity

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

Not listed.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Not available.

**Aspiration hazard** Not available.

**Mixture versus substance information** Not available.

**Other information** Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** No toxicity data noted for the ingredient(s).

**12.2. Persistence and degradability** Not available.

**12.3. Bioaccumulative potential** Not available.

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

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

**12.4. Mobility in soil** Not available.

**12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** Not available.  
**Contaminated packaging** Not available.  
**EU waste code** Not available.

## SECTION 14: Transport information

### ADR

**14.1. UN number** UN1549  
**14.2. UN proper shipping name** Antimony compound, inorganic, solid, n.o.s. (Nickel Antimonide (NiSb))  
**14.3. Transport hazard class(es)**  
**Class** 6.1(PGIII)  
**Subsidiary risk** -  
**Label(s)** 6.1  
**Hazard No. (ADR)** 60  
**Tunnel restriction code** E  
**14.4. Packing group** III  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Not available.

### RID

**14.1. UN number** UN1549  
**14.2. UN proper shipping name** Antimony compound, inorganic, solid, n.o.s. (Nickel Antimonide (NiSb))  
**14.3. Transport hazard class(es)**  
**Class** 6.1(PGIII)  
**Subsidiary risk** -  
**Label(s)** 6.1  
**14.4. Packing group** III  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Not available.

### ADN

**14.1. UN number** UN1549  
**14.2. UN proper shipping name** Antimony compound, inorganic, solid, n.o.s. (Nickel Antimonide (NiSb))  
**14.3. Transport hazard class(es)**  
**Class** 6.1(PGIII)  
**Subsidiary risk** -  
**Label(s)** 6.1  
**14.4. Packing group** III  
**14.5. Environmental hazards** No.  
**14.6. Special precautions for user** Not available.

### IATA

**14.1. UN number** UN1549  
**14.2. UN proper shipping name** Antimony compound, inorganic, solid, n.o.s. (Nickel Antimonide (NiSb))  
**14.3. Transport hazard class(es)**  
**Class** 6.1(PGIII)  
**Subsidiary risk** -  
**14.4. Packing group** III  
**14.5. Environmental hazards** No.  
**ERG Code** 6L  
**14.6. Special precautions for user** Not available.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

## IMDG

<b>14.1. UN number</b>	UN1549
<b>14.2. UN proper shipping name</b>	ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Nickel Antimonide (NiSb))
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGIII)
<b>Subsidiary risk</b>	-
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-A, S-A
<b>14.6. Special precautions for user</b>	Not available.

ADN; ADR; IATA; IMDG; RID



## 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**

Nickel Antimonide (NiSb) (CAS 12035-52-8)

**National regulations** Not available.

**15.2. Chemical safety assessment** Not available.

## **SECTION 16: Other information**

**List of abbreviations** Not available.

**Information on evaluation method leading to the classification of mixture** Not available.