MATERION

PRODUCT INFORMATION SHEET

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

1.1. Product identifier

Trade name or

Tin Antimony Targets

designation of the mixture

Registration number Document number G27

Synonyms None.

Issue date 29-January-2019

Version number 03

Revision date 02-August-2021

1.3. Details of the supplier of the product information sheet

Supplier

Materion Advanced Materials Company name **Address** 6070 Parkland Boulevard

United States

Division

Telephone 1.216.383.4019

e-mail ehs@materion.com Theodore Knudson Contact person 1.4. Emergency telephone See Section 16.

number

09-February-2021 Supersedes date

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

Manufacture of computer, electronic and optical products, electrical equipment **Identified uses**

Scientific research and development

Other: Manufacture of medical and defense equipment

Uses advised against Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Consumer uses: Private households (= general public = consumers)

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Advanced Materials **Address** 6070 Parkland Boulevard

United States

Division

Telephone 1.216.383.4019

e-mail ehs@materion.com **Contact person** Theodore Knudson 1.4. Emergency telephone See Section 16.

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

The products are classified as articles and, as such, do not present a physical or health hazard ir **Hazard summary**

the present form. If the products are processed or handled in ways that generate particles (dust. fume, particles or powder) and/or chemical compounds, a potential health hazard could exist and

PIS SPAIN

risk management measures must be taken to minimize risk.

2.2. Label elements

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

Hazard pictograms None. Signal word None.

Material name: Tin Antimony Targets 1/7

2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 **Hazard statements** The material as sold in solid form is generally not considered hazardous. However, if the process

involves grinding, melting, cutting or any other process that causes a release of dust or fumes,

hazardous levels of airborne particulate could be generated.

Precautionary statements

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Store away from incompatible materials. Storage

Disposal

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

Supplemental label

For further information, please contact the Product Stewardship Department at +1.216.383.4019.

information

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	C	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Tin	95 - 9	97	7440-31-5 231-141-8	-	-	#
	Classification: -					
Antimony	3 - 5	5	7440-36-0 231-146-5	-	051-003-00-9	
	Classification: Aquatic	Chronic	c 2;H411			

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (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 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison

centre or doctor/physician if you feel unwell.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

None known.

4.2. Most important

symptoms and effects, both

acute and delayed

4.3. Indication of any immediate medical attention

and special treatment

needed

Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted. None known.

5.1. Extinguishing media

Suitable extinguishing

media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing None known.

media

5.2. Special hazards arising

from the substance or mixture

This product is not flammable.

5.3. Advice for firefighters

Special protective equipment for firefighters

Use protective equipment appropriate for surrounding materials.

Special firefighting

procedures

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

water spray to cool unopened containers.

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

Material name: Tin Antimony Targets PIS SPAIN 2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 2/7

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. For personal protection, see section 8 of

the PIS.

For emergency responders

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during

clean-up. Use personal protection recommended in Section 8 of the PIS.

6.2. Environmental precautions

Collect spillage.

6.3. Methods and material for containment and cleaning up

Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in

suitable container for disposal. For waste disposal, see section 13 of the PIS.

6.4. Reference to other

sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames and high temperatures.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Spain. Occupational Exposure Limits

Components	Туре	Value
Antimony (CAS 7440-36-0)	TWA	0,5 mg/m3
Tin (CAS 7440-31-5)	TWA	2 mg/m3

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU,

2017/164/EU

Components	Туре	Value
Tin (CAS 7440-31-5)	TWA	2 mg/m3

Biological limit values

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

Recommended monitoring

Follow standard monitoring procedures.

procedures **Derived no effect levels**

Not available.

Predicted no effect concentrations (PNECs)

(DNELs)

Not available.

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation 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 If contact is likely, safety glasses with side shields are recommended.

Skin protection

- Hand protection Wear gloves to prevent metal cuts and skin abrasions during handling.

- Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate thermal protective clothing, when necessary. Thermal hazards

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.

Material name: Tin Antimony Targets PIS SPAIN Print date: 02-August-2021

Environmental exposure

controls

Good general ventilation 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Solid. Physical state Solid. **Form** Colour Gray-silver Odour None

Odour threshold Not applicable. Not applicable.

Melting point/freezing point

231,9 °C (449,42 °F) estimated / Not applicable.

Initial boiling point and

boiling range

Not applicable.

Flash point Not applicable. **Evaporation rate** Not applicable. Flammability (solid, gas) None known. Upper/lower flammability or explosive limits

Explosive limit - lower (

Not applicable.

%)

Explosive limit - lower (

%) temperature

Not applicable.

Explosive limit – upper

(%)

Not applicable.

Explosive limit - upper (

%) temperature

Not applicable.

Vapour pressure Not applicable. Vapour density Not applicable. Relative density Not applicable.

Solubility(ies)

Solubility (water) Insoluble. **Partition coefficient** Not applicable. Not applicable. (n-octanol/water) **Auto-ignition temperature** Not applicable. **Decomposition temperature** Not applicable. Viscosity Not applicable. **Explosive properties** Not explosive. Oxidising properties Not oxidising.

9.2. Other information

Density 7,24 g/cm3 estimated

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous No dangerous reaction known under conditions of normal use.

reactions

10.4. Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with

incompatible materials.

10.5. Incompatible materials Acids. Strong oxidising agents. Chlorine.

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

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

Material name: Tin Antimony Targets PIS SPAIN 2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 4/7

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected. No adverse effects due to skin contact are expected. Skin contact

Eye contact Not likely, due to the form of the product. Ingestion Expected to be a low ingestion hazard.

Symptoms May cause respiratory irritation.

11.1. Information on toxicological effects

None known. **Acute toxicity**

Skin corrosion/irritation Not likely, due to the form of the product.

Serious eye damage/eye

irritation

None known.

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation Not a skin sensitiser.

Germ cell mutagenicity Not classified. Carcinogenicity Not classified. Not classified. Reproductive toxicity Specific target organ toxicity Not classified.

- single exposure

Specific target organ toxicity

- repeated exposure

Not classified.

Aspiration hazard

Mixture versus substance

information

Not an aspiration hazard. No information available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Not relevant, due to the form of the product.

12.2. Persistence and

degradability

No data is available on the degradability of this substance.

12.3. Bioaccumulative

potential

No data available.

Partition coefficient

n-octanol/water (log Kow)

Not applicable.

Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil No data available.

12.5. Results of PBT and

vPvB assessment

Not a PBT or vPvB substance or mixture.

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste 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).

Contaminated packaging 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

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal** methods/information

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

Dispose in accordance with all applicable regulations. Special precautions

SECTION 14: Transport information

ADR

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

Material name: Tin Antimony Targets PIS SPAIN 2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 5 / 7

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 (EU) 2019/1021 On persistent organic pollutants (recast), 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

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

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

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 Regulation (EC) 1272/2008 (CLP

Regulation) as amended.

National regulations Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as

amended.

15.2. Chemical safety

assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations Not available. References Not available. Information on evaluation Not applicable. method leading to the

PIS SPAIN

Material name: Tin Antimony Targets

classification of mixture

2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 6/7 Full text of any H-statements not written out in full under Sections 2 to 15

H411 Toxic to aquatic life with long lasting effects.

Revision information

Product and Company Identification: Product and Company Identification Physical & Chemical Properties: Multiple Properties

Training information

Follow training instructions when handling this material.

Disclaimer

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To avoid any misunderstandings or incorrect assumptions by the receiver of the safety information, it should be made clear that the supplied information is not in the form of a Safety Data Sheet (SDS), but is actually a voluntary Product Information Sheet closely following the guidelines of the Safety Data Sheet — COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 (REACH/SDS).

Material name: Tin Antimony Targets

PIS SPAIN

2633 Version #: 03 Revision date: 02-August-2021 Print date: 02-August-2021 7 / 7