



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: INDIUM ANTIMONIDE
Product code: INSB.

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

N/A

1.3. Details of the supplier of the safety data sheet

Registered company name: SAINT-GOBAIN CRISTAUX & DETECTEURS.
Address: 104, Route de Larchant.F-77140.SAINT-PIERRE-LES-NEMOURS.France.
Telephone: +33 (0)1 64 45 10 10. Fax: -.
<http://crystals.saint-gobain.com>

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4.
Acute inhalation toxicity, Category 4.
Hazardous to the aquatic environment - Chronic hazard, Category 2.
This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Possibility of noxious effects with symptoms of slight poisoning by inhalation and swallowing.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:



GHS07



GHS09

Signal Word:

WARNING

Product identifiers:

EC 215-192-3

INDIUM ANTIMONIDE

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 mist.

P273

Avoid release to the environment.

Precautionary statements - Response:

P301 + P312

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P330 Rinse mouth.

P391 Collect spillage.

Precautionary statements - Disposal:

P501 Dispose of contents/container at a disposal facility in accordance with local regulations.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols:



Harmful



Dangerous for the environment

Contains:

EC 215-192-3 INDIUM ANTIMONIDE

Risk phrase:

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 20/22 Harmful by inhalation and if swallowed.

Safety phrase:

S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

S 60 This material and its container must be disposed of as hazardous waste.

S 9 Keep container in a well-ventilated place.

S 57 Use appropriate container to avoid environmental contamination.

2.3. Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substances****Composition :**

Identification	Name	Classification	%
CAS: 1312-41-0 EC: 215-192-3	INDIUM ANTIMONIDE	GHS07, GHS09, Wng Xn,N H:302-332-411 R: 51/53-20/22	98.0000 %

3.2. Mixtures

No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) n° 1907/2006.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation:**

In the event of massive inhalation of dust, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

Wash the skin thoroughly with soap and water or a recognised cleaner.

In the event of swallowing:

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

For non fire-fighters

Avoid inhaling dust.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For fire-fighters

Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming).

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions

In all cases, recover emissions at source

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the substance is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place

Keep away from food and drink, including those for animals.

Packaging

Always keep in packaging made of an identical material to the original

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No data available.

8.2. Exposure controls**Personal protection measures, such as personal protective equipment**

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149.

Category:

- FFP1

With this preparation, particularly avoid inhaling dust.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information:**

Physical state:	solid
-	Crystal.
Colour:	Dark grey.

Important health, safety and environmental information:

pH of the substance or preparation:	not relevant.
The pH is impossible to measure or its value is not relevant.	
Flash point interval:	not relevant.
Vapour pressure:	not relevant.
Density:	5.8
Water solubility:	Insoluble.
Melting point/melting range:	523 °C.

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

INSB - INDIUM ANTIMONIDE

No data available.

10.2. Chemical stability

This substance is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- heating
- heat
- formation of dusts

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from:

- strong acids
- oxidising agents

10.6. Hazardous decomposition products

May release highly toxic gas (SbH₃) by contact with acids.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Harmful if swallowed.

Harmful by inhalation.

Repeated or prolonged contact with the substance may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

SECTION 12: ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity**Substances**

No aquatic toxicity data available for the substances.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK):

WGK 2 (VwVwS vom 27/07/2005, KBws): Hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

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Empty container completely. Keep label(s) on container.
Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2011 - IMDG 2010 - ICAO/IATA 2011).

- Classification:



- Environmentally hazardous material:



UN1549=ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S.
(indium antimonide)

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	6.1	T5	III	6.1	60	5 kg	45 274 512	E1	2	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ			
	6.1	-	III	5 kg	F-A,S-A	45 274	E1			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	6.1	-	III	670	100 kg	677	200 kg	A12	E1	
	6.1	-	III	Y645	10 kg	-	-	A12	E1	

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Particular provisions:**

No data available.

- German regulations concerning the classification of hazards for water (WGK):

Germany: WGK 2 (VwVwS vom 27/07/2005, KBws)

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 3:

H302	Harmful if swallowed.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
R 20/22	Harmful by inhalation and if swallowed.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefährdungsklasse (Water Hazard Class).