

1. Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Product name: Indium
CAS-No.: 7440-74-6
EC-No.: 231-180-0

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

Identified use: Laboratory chemical

1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH
Wittelsbacherstraße 42
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

1.4 Emergency Phone: +49 9287 881-174 (during office hours)

Fax: +49 9287 881-505

E-mail Address: service@ngb.netzsch.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Void

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Void

Hazard
pictograms:

Signalword: Void

Hazard statements: Void

Precautionary statements: Void

Additional information: -

2.3 Other hazards

All chemicals are potentially dangerous.
They are therefor only be handled by specially trained personnel with the necessary care.

Results of PBT- und vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition / information on ingredients

3.1 Chemical characterization:

Substances

CAS-No. Description: 7440-74-6 indium

Identification number(s):

EC number: 231-180-0

Formula: In

Molar mass [g/mol]: 114.82

4. First aid measures

4.1 Description of first aid measures

General information: Consult a physician. Show this safety data sheet to the doctor in attendance.

After inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After skin contact: Wash off with soap and plenty of water. Consult a physician.

After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After swallowing: Rinse out mouth and drink a glass of water. Do not induce vomiting. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire-Fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents: Special powder for metal fires. Do not use water.
Dry sand

For safety reasons unsuitable extinguishing agents: Water
Foam

5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

-

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.
Wear fully protective suit.

Additional information: -

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

6.2 Environmental precautions

Do not allow to enter sewers / ground water or penetrate the soil.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Handling corresponding to laboratory safety guidelines.

Information about fire and explosion protection:

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for safe storage, including any incompatibilities: No special requirements.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -

7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Individual protection measures:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection:

Required when dusts are generated: filter P1.

Protection of hands:

Protective gloves:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Material: Nitrile

Eye protection:

Tightly sealed goggles

Body protection:

Protective work clothing

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

<u>Appearance</u> Form: Colour:	Solid metallic
Odour:	Odourless
Odour threshold:	No information available.
pH-value:	No information available.
<u>Change in condition</u> Melting point / Melting range: Boiling point / Boiling range:	156.61°C 2080°C
Flash point:	No information available
Flammability (solid, gaseous):	Product is not flammable.
Ignition temperature:	No information available
Decomposition temperature:	No information available
Self-igniting:	No information available
Danger of explosion:	Product does not present an explosion hazard.
<u>Explosion limits</u> Lower: Upper:	No information available No information available
Oxidizing properties:	No information available
Vapour pressure at 20°C:	0 hPa
Density at 20°C:	7.31 g/cm ³
Relative density:	No information available
Vapour density:	No information available
Evaporation rate:	No information available
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol / water):	No information available
<u>Viscosity</u> Dynamic: Kinematic:	No information available No information available

9.2 Other information

No further relevant information available.

10. Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No information available.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

Mercury compounds
Sulphur

10.6 Hazardous decomposition products

No information available.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD / LC50 values relevant
for classification:

Quantitative data on the toxicity of this product are not
available.

Potential health effects

Skin:	No irritation
Eyes:	No irritation
Inhalation:	Only intense contact with dusts may lead to adverse health effects
Ingestion	No information available
Sensitization:	No sensitizing effects known.

CMR effects

Germ cell mutagenicity:	No information available
Carcinogenicity:	No information available
Reproductive toxicity:	No information available

Aspiration hazard:

No information available.

Specific target organ toxicity – single exposure:

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity – repeated exposure:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Further information:

The product should be handled with the usual care as necessary for chemicals.

12. Ecological information**12.1 Toxicity****Aquatic toxicity**

Quantitative data on the ecological effect of this product are not available.

12.2 Persistence and degradability

Persistence: No further relevant information available.

Degradability: No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects

Remark: -

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13. Disposal considerations**13.1 Waste treatment methods**

Recommendation: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations. Waste code must be classified as hazardous.

Uncleaned packaging

Recommendation: Disposal same as for unused product.

14. Transport information

	ADR	IMDG	IATA
14.1 UN-Number	Void	Void	Void
14.2 UN proper shipping name	Void	Void	Void
14.3 Transport hazard class(es) / -label			
14.4 Packing group:	Void	Void	Void
Transport hazard class(es):	Void	Void	Void
Label:	Void	Void	Void
danger symbol:			
14.5 Environmental hazards:	No	No	No

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

15. Regulatory information

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

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Waterhazard class: Generally not hazardous for water

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other Information

Guarantee

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

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