

INTATRADE  
 MATERIAL SAFETY DATA SHEET  
 according to 1907/2006/EC, Article 31

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## 1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Product name: **Indium (III) chloride, tetrahydrate**  
 Product code: EO00922  
 Company: INTATRADE Chemicals GmbH  
 Bahnhofstr. 1  
 06774 Muldestausee OT Friedersdorf, Germany  
 Phone: +49 3493/605464  
 Fax : +49 3493/605470  
 e-mail: [intatrade@intatrade.de](mailto:intatrade@intatrade.de)

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 GHS05 corrosion  
 Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
 GHS07

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Acute Tox. 4 H302 Harmful if swallowed.  
 C; Corrosive  
 R34: Causes burns.  
 Xn; Harmful  
 R22: Harmful if swallowed.

Information concerning particular hazards for human and environment:

Not applicable

Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.



GHS05



GHS07

Hazard pictograms

Signal word

Hazard statements

**Danger**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P405 Store locked up.

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

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.: 10025-82-8  
EC-No.: 233-043-0

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### 4. FIRST AID MEASURES

After inhalation	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.
After skin contact	Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.
After eye contact	Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing	Seek medical treatment. Most important symptoms and effects, No further relevant information available.
both acute and delayed Indication of any immediate medical attention and special treatment needed	No further relevant information available.

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### 5. FIREFIGHTING MEASURES

Suitable extinguishing agents	CO <sub>2</sub> , extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Special hazards arising from the substance or mixture	If this product is involved in a fire, the following can be released: Hydrogen chloride (HCl) Metal oxide
Advice for firefighters	Protective equipment: Wear self-contained breathing apparatus. Wear full protective suit.

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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Environmental precautions:	Do not allow material to be released to the environment without proper governmental permits.
Methods and material for containment and cleaning up:	Use neutralizing agent. Dispose of contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to other sections	See 7 for information on safe handling See section 8 for information on personal protection equipment. See section 13 for information on disposal.

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### 7. HANDLING AND STORAGE

Precautions for safe handling	Handle under dry protective gas. Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires: Conditions for safe storage, including any incompatibilities	No information known.
Storage Requirements to be met by storerooms and containers: Information about storage in	No special requirements. Store away from water

Further information about storage conditions:

Store under dry inert gas.  
This product is hygroscopic.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
Protect from humidity and keep away from water.  
Store in a locked cabinet or with access restricted to technical experts or their assistants.  
No further relevant information available.

Specific end use(s)

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with critical values that require monitoring at the workplace:

Indium(III) chloride anhydrous (100.0%)  
WEL () Short-term value: 0.3 mg/m<sup>3</sup>  
Long-term value: 0.1 mg/m<sup>3</sup>  
as In

Additional information:  
Exposure controls  
General protective and hygienic measures

No data  
Personal protective equipment  
The usual precautionary measures should be adhered to in handling the chemicals.  
Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.  
Maintain an ergonomically appropriate working environment.

Breathing equipment:  
Protection of hands:

Use breathing protection with high concentrations.  
Check protective gloves prior to each use for their proper condition.  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Material of gloves  
Penetration time of glove material  
Eye protection:

Impervious gloves  
Not determined  
Safety glasses  
Tightly sealed safety glasses.  
Face protection

Body protection:

Full face protection  
Protective work clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Various forms (powder/flake/crystalline, etc.)  
Colour: White  
Smell: Not determined  
Odour threshold: Not determined.  
pH-value: Not applicable.

Change in condition

Melting point/Melting range: 586°C  
Boiling point/Boiling range: 800°C  
Sublimation temperature / start: 300°C

Inflammability (solid, gaseous) Not determined.  
Ignition temperature: Not determined  
Decomposition temperature: Not determined  
Self-inflammability: Not determined.  
Critical values for explosion:  
Lower: Not determined

Steam pressure:	Not applicable.
Density at 20°C	3.46 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with Water at 20°C:	67 g/l
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	No further relevant information available.

## 10. STABILITY AND REACTIVITY

Reactivity	Chemical stability
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Possibility of hazardous reactions	No dangerous reactions known
Incompatible materials:	Acids Water/moisture
Hazardous decomposition products:	Hydrogen chloride (HCl) Metal oxide

## 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects	
Acute toxicity:	
Primary irritant effect:	
on the skin:	Corrosive effect on skin and mucous membranes.
on the eye:	Strong corrosive effect.
Sensitization:	No sensitizing effect known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute and/or other multiple dose toxicity data for components in this product. The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive and/or mutation data for components in this product.

## 12. ECOLOGICAL INFORMATION

Toxicity	
Aquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	Do not allow material to be released to the environment without proper governmental permits.
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Recommendation	Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.
Uncleaned packagings: Recommendation:	Disposal must be made according to official regulations. Recommended cleaning agent: Water, if necessary with cleaning agent.

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### 14. TRANSPORT INFORMATION

UN-Number	ADR, IMDG, IATA UN3260
UN proper shipping name	
ADR	3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Indium(III) chloride anhydrous)
IMDG, IATA	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Indium(III) chloride anhydrous)
Transport hazard class(es)	
ADR	Class 8 (C2) Corrosive substances. Label 8
IMDG, IATA	Class 8 Corrosive substances. Label 8
Packing group	
ADR, IMDG, IATA	II
Environmental hazards:	Marine pollutant: No
Special precautions for user	Warning: Corrosive substances.
Kemler Number:	80
EMS Number:	F-A,S-B
Segregation groups	Acids
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	Limited quantities (LQ)      1 kg Transport category            2 Tunnel restriction code        E
UN "Model Regulation":	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Indium(III)chloride anhydrous), 8, II

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### 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture	
Labelling according to Regulation (EC) No 1272/2008	The substance is classified and labelled according to the CLP regulation.
Hazard pictograms	GHS05 GHS07
Signal word	Danger
Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.
Precautionary statements	P260 Do not breathe dust/fume/gas/mist/vapours/spray. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P405 Store locked up. P501 Dispose of contents/container in accordance with

National regulations

Information about limitation of use: Employment restrictions concerning young persons must be observed.  
For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

REACH - Pre-registered substances Substance is listed.

Substances of very high concern

(SVHC) according to REACH,

Article 57

Substance is not listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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## 16. OTHER INFORMATION

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Intatrade Chemicals GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.