

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: INDIUM SULPHATE (Hydrate) 99.9% AR
 CAS#: 304655-87-6
 Chemical Name: INDIUM SULPHATE (Hydrate) 99.9% AR
 Chemical Formula: $\text{In}_2(\text{SO}_4)_3 \cdot x\text{H}_2\text{O}$

Composition and Information on Ingredients

Name	S.K.U	% by Weight
INDIUM SULPHATE (Hydrate) 99.9% AR	GCS-5893	100

Substances
 Formula : $\text{In}_2(\text{SO}_4)_3 \cdot x\text{H}_2\text{O}$
 Molecular weight :
 517.82 g/mol
 CAS# : 304655-87-6
 No components need to be disclosed according to the applicable regulations.

Hazards Identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

Other hazards : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

First Aid Measures

Description of first aid measures:

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with

water.

Most important symptoms and effects, both acute and delayed: No data available.
 Indication of any immediate medical attention and special treatment needed: No data available.

Fire and Explosion Data

Extinguishing media:

Suitable extinguishing media : Use water spray, alcohol-resistant foam,
 dry chemical or carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed
 containers.

Special hazards arising from the substance or mixture:

Sulphur oxides, Indium/indium oxides

Advice for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Avoid breathing vapours, mist or gas.

Environmental precautions : No special environmental precautions required

Methods and material for containment and cleaning up:

Clean up methods : Sweep up and shovel. Keep in suitable, closed containers for disposal.

Handling and Storage

Precautions: Provide appropriate exhaust ventilation at places where dust is formed.

Storage: Store in cool place.

Keep container tightly closed in a dry
 and well-ventilated place. Handle and
 store under inert gas. hygroscopic

Storage class (TRGS 510): Non Combustible Solids

Exposure Controls/Personal Protection

Exposure controls:

Personal protection: Avoid all unnecessary exposure.

- Respiratory protection: Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Hand protection: Wear protective gloves.
- Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands
- Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Others: When using, do not eat, drink or smoke.

Control parameters:

Occupational Exposure Limits: No data available.

Physical and Chemical Properties

Physical state and appearance	: Solid.
Odor	: Not available.
Taste	: Not available.
Molecular Weight	: Not available.
Color	: Not available.
pH (1% soln/water)	: Not available.
Boiling Point	: Not available.
Melting Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: Not available.
Vapor Pressure	: Not applicable.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: Not available.
Solubility	: Not available.

Stability and Reactivity Data

Stability: The product is stable.

Instability

Temperature:

Not available.

Conditions to avoid:

Avoid moisture.

Incompatibility with various substances: Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.-Sulphur oxides, Indium/indium oxides Other decomposition products-No data available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Hazardous decomposition products: Fumes. Carbon monoxide. Carbon dioxide.

Polymerization: No.

Toxicological Information

Information on toxicological effects:

Acute toxicity:

- Inhalation: Based on available data, the classification criteria are not met.

- Dermal: Based on available data, the classification criteria are not met.

- Ingestion: Based on available data, the classification criteria are not met. Corrosion: Based on available data, the classification criteria are not met. Irritation: Based on available data, the classification criteria are not met. Sensitization: Based on available data, the classification criteria are not met. Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: IARC:No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Toxic for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Toxicological Data on Ingredients: Not available.

Ecological Information

Toxicity information: Not available.

BOD5 and COD: Not available.

Persistence - degradability: Not available.

Bioaccumulative potential: Not established.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Disposal Considerations

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

Transformation Information

Land transport (ADR-RID)
General information: Not regulated.

Sea transport (IMDG) [English only]
General information: Not regulated.

Air transport (ICAO-IATA) [English only]
General information: Not regulated.

Other Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment:

For this product a chemical safety assessment was not carried out.



Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

 **makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly,  will not be responsible for damages resulting from use of or reliance upon this information.**