SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: SILVER SULFATE

SDS Number: SDS-6133  Revised Date: 28 FEBRUARY 2018

Product Use: INDUSTRIAL USE . (Ag2SO4)

MANUFACTURER:

In America:
The Indium Corporation of America®.
34 Robinson Rd., Clinton, NY 13323
Information: (315) 853-4900
nswarts@indium.com

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USA: 1 (800) 424-9300
Outside USA: +1 (703) 527-3887

In Europe:
The Indium Corporation of America® (European Operations)
7 Newmarket Ct
Kingston, Milton Keynes, UK, MK 10 OAG
Information: +44 [0] 1908 580400

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Indium Corporation of America
Asia-Pacific Operations-Singapore
29 Kian Teck Avenue
Singapore 628908
Information: +65 6268-8678

In China:
Indium Corporation (Suzhou), Co., Ltd.
No. 428 Xinglong Street
Suzhou Industrial Park
Suchun Industrial Square
Unit No. 14-C
Jiangsu Province, China 215126
Information: (86) 512-6283-4900
2. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY:

- Eye
- Inhalation
- Skin
- Ingestion

CARCINOGEN LISTED IN:

- NTP
- IARC
- OSHA
- Not Listed

GHS:

Signal Word: Danger

Hazard statement(s)

- H318 Causes serious eye damage
- H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

- P233 Keep container tightly closed
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P270 Do not eat, drink or smoke when using this product
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P362 +P364 Take off contaminated clothing and wash before reuse
- P301 + P314 IF SWALLOWED: Get Medical advice/attention if you feel unwell
- P302 +P352 IF ON SKIN: Wash with plenty of soap and water
- P304 + 341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + 351 IF IN EYES: Rinse continuously with water for several minutes (15 mins)
- P391 Collect spillage

Classification:

- Serious eye irritation- Category 1
- Chronic aquatic toxicity- Category 1

POTENTIAL HEALTH EFFECTS:

Eye Contact: Causes eye damage, may be serious if not promptly removed..

Ingestion: May be harmful.

Inhalation: May cause irritation or harm.

Skin Contact: May cause irritation or harm.

Note: The Indium Corporation does not recommend, manufacture, market or endorse any of its products for human consumption.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>% wt/v</th>
<th>CAS Registry #/EINECS</th>
<th>PEL mg/m³</th>
<th>TLV-TWA mg/m³</th>
<th>TLV-STEI mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Sulfate</td>
<td>100</td>
<td>10294-26-5/233-653-7</td>
<td>N.E.</td>
<td>0.01</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

N.E. = Not established

4. FIRST AID MEASURES

Eye Contact: Hold eyelids apart and flush eyes with plenty of tepid water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion: If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not established.
Method: Not established.
Auto-ignition Temperature: Not established.
Flammable Limits: Limits not established. Not flammable. Will not burn.
Extinguishing Media: Use extinguishers appropriate for the surrounding fire conditions. Water spray/dry chemical/carbon dioxide
Special Fire Fighting Procedures: Firefighters must wear NIOSH approved self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Isolate spill and clean up with absorbent or neutralize. Place material in proper waste container. An approved air purifying respirator with acid gas/particulate cartridge and other personal protective equipment such as gloves is recommended. Dispose of in accordance with Federal, State and Local regulations. Do not let product enter drain.

7. HANDLING AND STORAGE

Handling: Keep containers tightly closed when not in use. Use care to avoid spills. Wear appropriate personal protective equipment. Always thoroughly wash your hands after handling this product. DO NOT touch or rub eyes until hands are washed.

Storage Precautions: Store product in tightly capped original containers in a cool, well ventilated and dry area.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation is recommended to control any air contaminants.

Personal protection:

Eyes: Wear chemical safety glasses/goggles. The addition of a face shield may be necessary during some work practices.

Respirator: A NIOSH approved air-purifying respirator with an particulate filter is recommended under certain circumstances where airborne concentrations are expected to be elevated.

Skin: Compatible chemical resistant gloves. Nitrile gloves are recommended.

Other: Lab coat, apron, eyewash fountain in work area. Avoid the use of contact lenses in high fume/splash areas.

Work/Hygienic Maintain good housekeeping. Clean up spills immediately. Good personal hygiene is essential. Avoid eating, smoking or drinking in the work area. Wash hands thoroughly with soap and water immediately upon leaving the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Crystalline/white</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>H2O = 1</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not established</td>
</tr>
<tr>
<td>Melting Point</td>
<td>652°C/1,206°F</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

General: Stable.

Conditions to Avoid: Not established.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition / Combustion: No data available

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity:
- National Toxicology Program (NTP): No
- Occupational Safety & Health Administration (OSHA): No
- U.N. International Agency for Research on Cancer (IARC): No

LD50: Not established.

LC50: Not established.

May cause argyria (a slate gray or bluish discoloration of the skin and deep tissues). Chemical and physical properties have not been fully investigated.
12. ECOLOGICAL INFORMATION
Contains a substance that is harmful to aquatic organisms, and may cause long lasting effects.
Toxicity to fish: static test EC10-Salmo trutta-0.00019 mg/l-217d
EC50-daphnia (water flea)- 0.004 mg/l-48h

13. DISPOSAL CONSIDERATION
Waste Disposal Method: Dispose of in accordance with all Federal, State and Local environmental regulations.

14. TRANSPORT INFORMATION
Transport in accordance with applicable regulations and requirements.

UN 3077, Environmentally hazardous substance, solid, N.O.S., 9, PG III (silver sulfate)

Ocean:
UN 3077, Environmentally hazardous substance, solid, N.O.S., 9, PG III MARINE POLLUTANT (silver sulfate)

Marine pollutant: YES
RQ (reportable quantity) 10 lbs

15. REGULATORY INFORMATION
The information in this Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated hereunder (29 CFR 1910.1200 ET. SEQ.).
This product has been classified in accordance with the guidelines set by the Dept. of Industrial Health of the Republic of Singapore.
This product has been classified in accordance with Mexican regulations NOM-018-STPS-2015 and NOM-010-STPS-2014.
Malaysia: This product has been classified in accordance with: Malaysian – OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATION OCTOBER 2013 – (CLASS). (GHS)
In China: Decree No. 591: Regulations on the Control over Safety of Hazardous Chemicals
16. OTHER INFORMATION

HMIS Hazard Rating:
- Health: 2
- Fire: 0
- Physical Hazards: 0

Revised Date: 28 FEBRUARY 2018

Prepared by: Nancy Swarts, Indium Corporation of America

Approved by: Nancy Swarts, Indium Corporation of America

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