

Heegermaterials

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

Section 1: Identification

1.1) Product identifier:

Product Name : Indium(III) Oxide
Synonyms :
CAS Number : 1312-43-2

1.2) Company information:

Address: Heeger Materials Inc.
230 Steele St Denver
CO 80206, United States
Telephone: +925-385-8104
Email: sales@heegermaterials.com
Emergency Telephone : +1-703-527-3887

1.3) Relevant identified uses of the substance or mixture and uses advised against:

Identifies uses: Laboratory chemicals, Synthesis of substances

Section 2: Hazard(s) Identification

2.1) Classification of the substance or mixture GHS classification in accordance with 29 CFR 1910 (OSHA HCS):

Not a hazardous substance or mixture.

2.2) GHS Label elements, including precautionary statements:

Not a hazardous substance or mixture.

2.3) Hazards not otherwise classified (HNOC) or covered by GHS:

None.

Section 3: Composition/Information on Ingredients

3.1) Substances:

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

Formula: In_2O_3
Molecular Weight: 277.63 g/mol
CAS Number: 1312-43-2
EC Number: 215-193-9
Index Number:

Component	Classification	Concentration
Indium(III) oxide		$\leq 100\%$

Section 4: First-Aid Measures

4.1) Description of first aid measures:

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2) Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3) Indication of any immediate medical attention and special treatment needed:

No data available

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

Section 5: Fire-Fighting Measures

5.1) Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2) Special hazards arising from the substance or mixture:

Indium/indium oxides

5.3) Advise for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary.

5.4) Further information:

No data available.

Section 6: Accidental Release Measures

6.1) Personal precautions, protective equipment, and emergency procedures:

Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. For personal protection see section 8.

6.2) Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3) Methods and materials for containment and cleaning up:

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

6.4) Reference to other sections:

For disposal see section 13.

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

Section 7: Handling and Storage

7.1) Precautions for safe handling:

For precautions see section 2.2.

7.2) Conditions for safe storage, including any incompatibilities:

Tightly closed. Dry.

Storage class (TRGS 510): 11: Combustible Solids

7.3) Specific end use(s):

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: Exposure Controls/Personal Protection

8.1) Control parameters:

Components with workplace control parameters

Component	CAS #	Value	Control Parameters	Basis
indium(III) oxide	1312-43-2	TWA	0.1 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		TWA	0.1 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	0.1 mg/m ³	USA. NIOSH Recommended Exposure Limits

8.2) Exposure controls:

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection:

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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.

Body protection:

Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.2) Information on basic physical and chemical properties:

a) Appearance (physical state, color, etc.)	Light yellow powder
b) Upper/lower flammability or explosive limits	No data available
c) Odor	No data available
d) Odor threshold	No data available

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

e) Vapor pressure	No data available
f) Vapor density	No data available
g) pH	No data available
h) Density	7.179 g/cm ³ at 25°C
i) Melting point/freezing point	1910°C
j) Solubility(ies)	No data available
k) Initial boiling point and boiling range	No data available
l) Flash point	No data available
m) Evaporation rate	No data available
n) Flammability (solid, gas)	No data available
o) Partition coefficient: n-octanol/water	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Viscosity	No data available
t) Explosive properties	No data available
u) Oxidizing properties	No data available

9.2) Other Safety information:

No data available

Section 10: Stability and Reactivity

10.1) Reactivity:

No data available

10.2) Chemical Stability:

Stable under recommended storage conditions.

10.3) Possibility of hazardous reactions:

No data available

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

10.4) Conditions to avoid:

No data available

10.5) Incompatible materials:

Strong oxidizing agents

10.6) Hazardous decomposition products:

In the event of a fire: see section 5.

Section 11: Toxicological Information

11.1) Information on toxicological effects:

Acute toxicity:

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/ eye irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity:

No data available

Specific target organ toxicity – single exposure:

No data available

Specific target organ toxicity – repeated exposure:

No data available

Aspiration hazard:

No data available

Additional information:

RTECS: NL1770000

Section 12: Ecological Information

12.1) Toxicity:

No data available

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:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6) Other adverse effects:

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

No data available

Section 13: Disposal Considerations

13.1) Waste treatment methods:

Product:

Waste material must be disposed of in accordance with the national and local No mixing with other waste.

Contaminated packaging:

Dispose of as unused product.

Section 14: Transport Information

DOT (US):

Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

Section 15: Regulatory Information

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

SAFETY DATA SHEET: Indium(III) Oxide

Version: 2.8

Revision Date: 03/04/2021

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:

No SARA Hazards

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

Further information

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. Heeger Materials Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: 2.8

Revision Date: 03/04/2021