



VI HALBLEITERMATERIAL GmbH
Material Safety Data Sheet
Indium Phosphide

1. Product and Company Identification

Trade Name: Indium Phosphide
Chemical Formula: InP

Manufacturer/Supplier: VI HALBLEITERMATERIAL GmbH Bergener
Street: Straße 14.,
City: Hannover
State: Niedersachsen
Zip Code: 30625
Country: Germany
Tel #: 0049 1626484175

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H350: May cause cancer
H361: Suspected of damaging fertility or the unborn child
H372: Causes damage to organs through prolonged or repeated exposure

Precautionary Statements: P202: Do not handle until all safety precautions have been read and understood
P260: Do not breathe dust/fume/gas/mist/vapors/spray
P264: Wash skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P281: Use personal protective equipment as required
P308+P313: IF exposed or concerned: Get medical advice/attention
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0
Physical: 1

3. Composition	
Chemical Family:	Ceramic
Additional Names:	N/A
Indium Phosphide (InP):	
Percentage:	100 wt%
CAS #:	22398-80-7
EC #:	244-959-5
4. First Aid Procedures	
General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention immediately.
Ingestion:	Never induce vomiting or give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention immediately.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention immediately.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Seek medical attention.
5. Firefighting Measures	
Flammability:	Non-flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.
6. Accidental Release Measures	
If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.
7. Handling and Storage	
Handling Conditions:	Avoid contact with skin and eyes. Avoid of dust and aerosols. Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	0.1 mg/m ³ as In, long-term value
Threshold Limit Value:	0.1 mg/m ³ as In, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Dark gray
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	1070 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	4.79 g/cc
Molecular weight:	145.79 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents, Acids
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume, Phosphorus oxides. Indium oxides

11. Toxicological Information

Potential Health Effects:	
Eyes:	Cause irritation
Skin:	Cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	The Registry of Toxic Effects of Chemical Substances (RTECS) has information on effects observed in laboratory animals.
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	Possible human carcinogen IARC: 2A - Group 2A: Probably carcinogenic to humans (Indium phosphide). 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. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. Ecological Information

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	Not hazardous for transportation
Hazard Class:	N/A
Packing Group:	N/A
UN Number:	N/A
Proper Shipping Name:	N/A

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	N/A

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised: 01/15/2023