

GHS Safety Data Sheet

SDS No. : GAI01PAEG

Date Issued: 2013/11/04

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: GaP Gallium phosphide

Product number:	Purity	Form	Size (mm) or Shape
GAI04PB	<99.999% (5N)	powder	—
GAI05GB	<99.999% (5N)	lumps	—

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
No data available	No data available	No data available

GHS Label:

Pictograms or symbols No data available

Warning word: Not applicable

Hazard information

Not applicable

Description of precaution

Not applicable

Additional hazard information :

See each section for reference.

Section 3. Composition / information on ingredients

Chemical or common name: Gallium phosphide
 Chemical formula: GaP
 Single Substance or Compound: Single substance
 Composition: 100%
 CAS #: 12063-98-8
 RTECS#: LW9675000
 TSCA inventory: listed
 EINECS: 2350572

Section 4. First aid measures

- Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
- Skin contact: Promptly flush contaminated skin with soap or mild detergent and water.
Contact physician if irritation continues.
- Inhalation: Remove the exposed person immediately and provide fresh air.
Get medical attention.
- Ingestion: Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

- Extinguishing media: Not applicable. Use media appropriate for surrounding fire.
- Fire fighting: Wear self contained breathing apparatus and protective clothing for fire fighting if necessary.
- Specific hazards arising from the chemical:
In case of fire, may liberate toxic gases/ fume.
- Combustion products: Oxide of phosphorus, gallium oxides.

Section 6. Accidental release measures

- Personal Precautions: Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dusts.
- Environmental hazard precautions:
Shut off leak if without risk.
Prevent flow out to river, etc. so as not to badly affect.
- Method for containment and cleaning up:
Indoor leakage: Ventilate as much as possible until the cleaning is completed.
Outdoor leakage: Work from the windward and evacuate the leeward crowd.
Gather up, pack in closed container as much as possible.
Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

- Safe handling: Handling worker wears suitable protective clothing, and use local ventilation equipment.

Precautions to be taken in storage:

- General precautions: Keep container or bottle tightly closed.
Store in a cool, dry place away from incompatible materials.

Section 8. Exposure controls / personal protection

- Exposure guideline: ACGIH(2013) : No data available
OSHA (2006) : No data available
- Facility measures: (In case of dust generating work)
Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, face shields, protective gloves.
(In case of dust generating work.)
Wear appropriate NIOSH/MSHA-approved respirator, air-supplied respirator, safety goggles, face shields, protective gloves, protective clothing, apron, including boots.

Section 9. Physical and chemical properties

Color and Form: Orange solid, odorless.
Chemical formula: GaP
Formula weigh 100.7
Melting point: 1465 °C
Boiling point: No data available
Density: 4.138 g/cm³
Water solubility Insoluble
Flammable: Difficult to ignite.
Oxidation: None

Section 10. Stability and reactivity

Stability: Stable in closed container.
Reactivity
Dust explosion: Fine powder may form explosive mixtures in air.
Incompatibility: Strong acids.
Condition to avoid: No data available
Hazardous decomposition products.:
Oxide of phosphorus, gallium oxides.

Section 11. Toxicological information

Acute toxicity: GHS : No data available
GaP oral mouse LD₅₀ = 8000 mg/kg (RTECS(2009))
Skin corrosive / irritation: GHS : No data available
Serious eyes damage / eye irritation: GHS : No data available
Respiratory sensitization: GHS : No data available
Skin sensitization: GHS : No data available
Germ cell mutagenicity: GHS : No data available
Carcinogenicity: GHS : No data available
Reproductive toxicity: GHS : No data available
Specific target organ toxicity
—single exposure: GHS : No data available
Specific target organ toxicity
—repeated exposure: GHS : No data available
Aspiration hazard: GHS : No data available
Other cautions: Mechanical stimulation by dust affects eyes, skin and respiratory system

Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment

–acute toxicity: GHS : No data available

–chronic toxicity: GHS : No data available

Hazardous the ozone layer: GHS : No data available

No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: No data available

ref.) Ga : Biological half-life 6 day, Rate of absorption Oral=0.001 Respiratory tract=0.25

Degradability: No data available

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed
Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN classification: Non-hazards

UN number: None

HS code: 2848.00

Marine pollution: None

Precautions: Container should be transported in a secure position, in a well-ventilated vehicle.

Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.