

GHS Safety Data Sheet

SDS No. : ALI03PAEG

Date Issued: 2018/05/08

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

1.1 Product Information

Product name: Al₄C₃ Aluminum carbide

Product number:	Purity	Form	Size (mm) or Shape
ALI03PB	—	powder	—
—	—	tablet	φ 20×t5 Various shapes, Various sizes

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Skin corrosion/ irritation: Category 2 Serious eye damage/eye irritation : Category 2 Specific target organ toxicity, single exposure: Category 3	No data available	Substances and mixtures which, in contact with water, emit flammable gases : Category 2

GHS Label: F, W



Pictograms or symbols:

Warning word: **DANGER**

Hazard information	Description of precaution
In contact with water releases flammable gas Causes skin irritation Causes serious eye irritation. May cause respiratory irritation	Keep away from any possible contact with water, because of violent reaction and possible flash fire. Protect from moisture. Handle under inert gas. Wear protective gloves / protective clothing / eye protection / respiratory protection / face protection during handling. Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. IN CASE OF FIRE: Wear protective gloves/eye protection/face protection. Use dry sand, dry sodium chloride based extinguishers or other Class D fire-extinguishing materials for extinction. DO NOT use water or foam. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information :

Reacts with water, liberating flammable gas.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients
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Chemical or common name:	Tetraaluminum tricarbide, Aluminum carbide
Chemical formula:	Al ₄ C ₃
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	1299-86-1
RTECS#:	not listed
TSCA inventory :	listed
EINECS:	2150762

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
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Extinguishing media:	Dry sand, dry sodium chloride based extinguishers or other Class D fire -extinguishing materials. DO NOT use water or foam.
Fire fighting:	Reacts with water, liberating flammable gas. Remove containers to safe place if possible. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dusts / fume / gases.
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:	Remove all sources of ignition. Avoid unnecessary contacts with spills. DO NOT use water with spills

Indoor leakage: Ventilate as much as possible until the cleaning is completed.

Outdoor leakage: Work from the windward and evacuate the leeward crowd.

Absorb or cover with dry sand, vermiculite or other suitable absorbent, and dispose of DOT-approved waste containers as much as possible. Carefully wash spill site with plenty of water after material pick up.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Handle the material in a dry inert gas atmosphere, utilizing glove bag or glove box. Air and moisture sensitive.

Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.

Keep container or bottle tightly closed when not in use.

Keep away from heat, sparks and naked flame.

Electrically ground all equipment when handling this material and use only non-sparking tools.

Precautions to be taken in storage:

General precautions: Store in a cool, dry, well ventilated and dark place away from incompatible materials.

Store the material in a sealed container, or in the original container under dry inert atmosphere.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2013): No data available
OSHA (2006) : No data available

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: 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: White or yellow solid

Chemical formula: Al₄C₃

Formula weigh 144.0

Melting point: >1400 °C (decomposes)

Boiling point: No data available.

Density: 2.36 g/cm³

Solubility: Water: Hydrolyzes in water.

Reacts with water to generate methane.

Flammability: Combustible substance

Oxidation: None

Section 10. Stability and reactivity

Stability:	Stable in an inert gas under room temperature.
Reactivity Condition to avoid:	Moisture, air
Incompatibility:	Water, acids, oxidizing agents

Section 11. Toxicological information

Acute toxicity :	GHS : No data available
Skin corrosive / irritation:	GHS : Category 2 ; Causes skin irritation
Serious eyes damage / eye irritation:	GHS : Category 2 ; Causes serious eye irritation
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 : Category 3 ; May cause respiratory irritation
Specific target organ toxicity —repeated exposure:	GHS : No data available
Aspiration hazard:	GHS : No data available

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.
Mobility in soil:	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.
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Section 14. Transport information

UN number:	1394
IATA shipping name:	ALUMINIUM CARBIDE
IATA classification:	Hazardous Class 4.3 (Substances which in contact with water emit flammable gases)
IATA packing group:	II
HS code:	2849.90
Marine pollution:	None

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.