

## GHS Material Safety Data Sheet

MSDS No. : LAA01PAEG

Date Issued: 2012/07/10

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

#### 1.1 Product Information

**Product name:** LaSi Lanthanum silicide, Powder

Product number:	Purity	Form	Size (mm) or Shape
LAA09PB	99.9%(3N)	Powder	—

#### 1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.  
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284  
 Phone: +81-49-284-1511 Fax: +81-49-284-1351  
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### Section 2. Hazards identification

#### GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Serious eye damage/eye irritation ; Category 2	No data available	Flammable solids ; Category 1

GHS Label: FW



Pictograms or symbols

Warning word: DANGER

Hazard information	Description of precaution
<b>Flammable solid</b> <b>Causes serious eye irritation</b>	Keep away from heat/ sparks/ open flames/ hot surfaces.-No smoking. Use explosion-proof electrical/ ventilating/ lighting equipment. Take precautionary measures static discharge. Wear protective gloves/protective clothing/eye protection/ respiratory protection/ face protection during handling. Avoid breathing dust/mist/fume. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling In case of fire: Use dry sand, dry sodium chloride based extinguishers or other Class D fire-extinguishing materials for extinction. DO NOT use water, foam or carbon dioxide. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Additional hazard information :

Contact with water liberates flammable gases.

With respect to additional hazard information, see Section 11.

### Section 3. Composition / information on ingredients

Single Substance or Mixture: Mixture

Hazardous Ingredients	Formula	Cas No.	Content by wt%	RTECS No.	TSCA Inventory	EINECS
Lanthanum	La	7439-91-0	83.2	—	listed	2310990
Silicon	Si	7440-21-3	16.8	VW0400000	listed	2311308

#### **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:**

Dry sand, dry sodium chloride based extinguishers or other Class D fire-extinguishing materials.

DO NOT use water, foam or carbon dioxide.

**Fire fighting**

This material is flammable solid.

Contact with water may liberate flammable gases.

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.

May re-ignite after fire is extinguished.

**Explosion hazards:**

Dust explosion: Fine powder forms explosive mixtures in air.

#### **Section 6. Accidental release measures**

**Personal Precautions:** Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/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:**

Avoid unnecessary contacts with spills.

DO NOT use water with spills.

Eliminate all ignition sources(no smoking, flares, sparks or flames in immediate area).

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.

Air and moisture sensitive.

Keep away from heat, sparks and naked flame.

Electrically ground all equipment when handling this material and use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment.

**Precautions to be taken in storage:**

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

**Section 8. Exposure controls / personal protection**

Exposure guideline:

Chemical Name		ACGIH(2012) TLV-TWA mg/m <sup>3</sup>	OSHA(2006) PEL-TWA mg/m <sup>3</sup>
Lanthanum	La	—	—
Silicon	Si	—	5(15)*

\*: Respirable fraction (Total dust)

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: Solid, odorless.  
Flammable: Flammable substance  
Oxidation: None

Ingredients Name	Formula	Atomic Weight	Melting Point( )	Boiling Point( )	Density (g/ cm <sup>3</sup> )	Water Solubility
Lanthanum	La	138.91	921	3457	6.145	cold water: soluble slowly hot water: dissoluble (H <sub>2</sub> )
Silicon	Si	28.09	1410	2355	2.33	insoluble

**Section 10. Stability and reactivity**

Stability: Stable in closed container.

Reactivity

Incompatibility: La Strong acids, strong oxidizing agents, halogens, phosphorus, sulfur.  
Si Oxidizing agents, sodium-potassium alloy, alkali-metal carbonates, halogens.

Condition to avoid: Moisture, air.

**Section 11. Toxicological information**

Acute toxicity(Oral): GHS : Not classified.; Falls below the lowest level.  
Si (16.8 wt%) oral rat LD<sub>50</sub> = 3160mg/kg bw (UCLID(2000))  
La (83.2 wt%) No data available.  
Acute toxicity estimate ATEmix = 3160 mg/kg  
Acute toxicity (Oral) : Not classified.

Acute toxicity(Dermal, inhalation) : GHS : No data available

Skin corrosive / irritation: GHS : No data available

Serious eye damage/eye irritation: GHS : Category 2 ; Causes serious eye irritation.

Si (16.8 wt%) Category 2B

La (83.2 wt%) No data available.

Classified as category 2.

Respiratory/ 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:	La: Biological half-life 500 day, Rate of absorption oral=0.0001 , Respiratory tract=0.25
	Si: Biological half-life 60 day, Rate of absorption oral=0.85 , Respiratory tract=0.68
Ozone layer:	No Freon or Halon

## 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:	3089
IATA shipping name:	Metal powder, flammable, n.o.s.
IATA classification:	Hazardous Class 4.1 (Flammable solids)
IATA packing group:	
HS code:	3824.90
Marine pollution:	None

## Section 15. Regulatory information

TSCA inventory : La , Si 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.