

## GHS Safety Data Sheet

SDS No. : SIE01PAEG

 Date Issued:1997/06/30  
 Last updated: 2014/08/06

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

#### 1.1 Product Information

**Product name:** Si Silicon, Powder

| Product number: | Purity      | Size (μm) | Product number: | Purity       | Size (μm) |
|-----------------|-------------|-----------|-----------------|--------------|-----------|
| SIE02PB         | 99%(2N)     | 300 pass  | SIE08PB         | 99.9%(3N)up  | 150 pass  |
| SIE03PB         | 99%(2N)     | 150 pass  | SIE09PB         | 99.9%(3N)up  | 75 pass   |
| SIE04PB         | 99%(2N)     | 75 pass   | SIE10PB         | 99.99%(4N)up | 300 pass  |
| SIE22PB         | 99%(2N)up   | —(dust)   | SIE11PB         | 99.99%(4N)up | 150 pass  |
| SIE23PB         | 99.9%(3N)   | ca. 5     | SIE12PB         | 99.99%(4N)up | 75 pass   |
| SIE19PB         | 99.9%(3N)up | 45 pass   | SIE20PB         | 99.99%(4N)up | 45 pass   |
| SIE07PB         | 99.9%(3N)up | 300 pass  |                 |              |           |

#### 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  
 Emergency Phone : +81-49-284-1511

### Section 2. Hazards identification

#### GHS Classification

| Health Hazards                                     | Environmental Hazards | Physical Hazards  |
|--|-----------------------|---|
| Serious eye damage/eye irritation<br>: Category 2B | No data available     | Pyrophoric solids : Not classified<br>Substances and mixtures which,<br>in contact with water, emit<br>flammable gases : Not classified |

#### GHS Label:

Pictograms or symbols No data available

**Warning word:** Warning

| Hazard information    | Description of precaution   |
|-----------------------|---|
| Causes eye irritation | Wear protective gloves/protective clothing / eye protection / respiratory protection / face protection during handling.<br>Avoid breathing dust/fume. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

#### Additional hazard information :

 This products are **crystalline silicon powder**.

With respect to additional hazard information, see Section 11.

**Section 3. Composition / information on ingredients**

|                               |                  |
|-------------------------------|------------------|
| Chemical or common name:      | Silicon          |
| Chemical formula:             | Si               |
| Single Substance or Compound: | Single substance |
| Composition:                  | 100%             |
| CAS #:                        | 7440-21-3        |
| RTECS#:                       | VW0400000        |
| TSCA inventory:               | listed           |
| EINECS:                       | 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: | If this product catch fire, use dry sand, dry sodium chloride based extinguishers or other Class D fire-extinguishing materials.<br>DO NOT use water, foam or carbon dioxide. |
| Fire fighting:       | Remove containers to safe place if possible.<br>Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.          |
| Explosion hazards:   | Dust explosion: Fine powder forms explosive mixtures in air.  |
| Combustion products: | Silicon oxides  |

**Section 6. Accidental release measures**

|   |  |
|---|--|
| Personal Precautions:                   | Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.   |
| Environmental hazard precautions:       | Shut off leak if without risk.<br>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.<br>Outdoor leakage: Work from the windward and evacuate the leeward crowd.<br>Gather up, pack in closed container as much as possible.<br>Carefully collect remnant and move to a safe place. |

**Section 7. Handling and storage****Precautions to be taken in handling:**

|                |  |
|----------------|--|
| Safe handling: | Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen. |
|----------------|--|

**Precautions to be taken in storage:**

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

|   |
|---|
| <b>Section 8. Exposure controls / personal protection</b> |
|---|

Exposure guideline: ACGIH(2013): No data available  
OSHA (2006) : PEL-TWA = 15 mg/m<sup>3</sup> (Total dust)  
= 5 mg/m<sup>3</sup> (Respirable fraction)

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.

|  |
|--|
| <b>Section 9. Physical and chemical properties</b> |
|--|

Color and Form: Bluish dark gray crystalline powder, odorless.

Chemical formula: Si

Atomic weight: 28.09

Melting point: 1410 °C

Boiling point: 2355 °C

Density: 2.3296 g/cm<sup>3</sup>

Water solubility: Insoluble

Flammable: No data available

Oxidation: None

|   |
|---|
| <b>Section 10. Stability and reactivity</b> |
|---|

Stability: Stable in closed container.

Reactivity

Incompatibility: Oxidizing agents, halogens, sodium-potassium alloy, alkali-metal carbonates.

Condition to avoid: No data available

Hazardous decomposition products : Silicon oxides

|  |
|--|
| <b>Section 11. Toxicological information</b> |
|--|

Acute toxicity(Oral): GHS : Not classified ; Falls below the lowest level.  
Si oral rat LD<sub>50</sub> = 3160 mg/kg bw (IUCILID(2000))

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

Skin corrosive / irritation: GHS : No data available

Serious eyes damage / eye irritation: GHS : Category 2B ; Causes 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 : 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 to the ozone layer: GHS : No data available

No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: Si biological half-life 60 day,  
Rate of absorption oral= 0.85, Respiratory tract= 0.68

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.**Section 14. Transport information**

UN classification: Non-hazards

UN number: None

HS code: 2804.61(Si $\geq$ 99.99%) , 2804.69(other)

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.