KJLC Product Code: EVMSI1047B

Silicon, powder and pieces
Manufacturer MSDS Number: Si

 SECTION 1 : Chemical Product and Company Identification

MSDS Name: Silicon, powder and pieces
Manufacturer Name: Kurt J. Lesker Company
Address:
1925 Worthington Ave
Clairton, PA 15205

For emergencies in the US, call CHEMTREC: 800-424-9300
Other Phone: US National Poison Hotline: (800)222-1222
Manufacturer MSDS Creation Date:
06/22/2006
Manufacturer MSDS Revision Date:
06/22/2006
Synonyms:
Silicon
Chemical Family: Non-metal
Chemical Formula: Si
Molecular Weight: 28.09
DOT HAZARD LABEL
No data.
Product Codes:
Si

 SECTION 2 : Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon</td>
<td>7440-21-3</td>
<td>0.0-100.0 %</td>
</tr>
</tbody>
</table>

 SECTION 3 : Physical And Chemical Characteristics

Physical State/Appearance:
Steel gray pieces or dark brown powder, no odor.

Physical State:
[ ] Gas, [ ] Liquid, [ X ] Solid

pH:
No data.

Vapor Pressure:
1 mm at 1724.0 C (3135.2 F) (VS. AIR OR MM HG)

Vapor Density:
Boiling Point:
2355.00 deg C (4271.0 deg F) to 2600.00 deg C (4712.0 deg F)

Melting Point:
1410.00 deg C (2570.0 deg F) to 1420.00 deg C (2588.0 deg F)

Solubility In Water:
insoluble

Specific Gravity:
2.33 gm/cc at 25.0 C (77.0 F) (WATER = 1)

Density:
No data.

Evaporation Point:
No data. (VS BUTYL ACETATE=1)

Percent Volatile:
N.A.

Flash Point:
N.A.

Upper Flammable Explosive Limit:
NA

Lower Flammable Explosive Limit:
NA

SECTION 4 : Fire And Explosion Hazards

Flash Point:
N.A.

Flash Point Method:
No data.

Upper Flammable or Explosive Limit: NA

Lower Flammable or Explosive Limit: NA

Extinguishing Media:
Not applicable. Use suitable extinguishing agent for surrounding materials and type of fire.

Fire Fighting Instructions:
Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire Hazards:
Elemental silicon is flammable when exposed to flame or by chemical reaction with oxidizing agents. May have a violent reaction with alkali carbonates; oxidants; (Al+PbO); Ca; CsC2; CoF2; F2; IF5; MnF3; Rb2C2; FNO; AgF; and NaK alloy. When heated it will react with water or steam to produce hydrogen gas.

SECTION 5 : Health Hazards

Silicon:
Route of Exposure:
Inhalation? No, Skin? No, Eyes? No, Ingestion? No, Other: N

Potential Health Effects:
Eye Contact:
Dust and powder may cause abrasive irritation.

Skin Contact:
May cause abrasive irritation.

Inhalation:
May cause abrasive irritation.
Ingestion:
   No acute health effects recorded.
Chronic Eye Contact:
   No chronic health effects recorded.
Chronic Skin Contact:
   No chronic health effects recorded.
Chronic Inhalation:
   No chronic health effects recorded.
Chronic Ingestion:
   No chronic health effects recorded.
Carcinogenicity:
   NTP? No , IARC Monographs? No , OSHA Regulated? No
Target Organs:
   No target organs recorded.
Signs/Symptoms:
   INHALATION: May cause a red, dry, throat and coughing. INGESTION: No acute or chronic health effects recorded. SKIN: May cause redness and scratches. EYE: May cause red, itching and watering.
Other Potential Health Effects:
   CARCINOGENICITY/OTHER INFORMATION: orl-rat LD50: 3160 mg/kg Standard Draize Test Rabbit: 3 mg mild reaction
Aggravation of Pre-Existing Conditions:
   Pre-existing respiratory disorders.
   See "Section II" LD 50/LC 50: See "Carcinogenicity/Other Information"

SECTION 6 : Emergency And First Aid Procedures

Physical Health Hazard:
   HEALTH HAZARDS (ACUTE AND CHRONIC): To the best of our knowledge the chemical, physical and toxicological properties of silicon have not been thoroughly investigated and recorded.
Eye Contact:
   Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if irritation persists.
Skin Contact:
   Wash area with mild soap and water.
Inhalation:
   Remove victim to fresh air.
Ingestion:
   Not applicable.
Note to Physicians:
   No data available.

SECTION 7 : Reactivity Data

Chemical Stability:
   Unstable [ ] Stable [ X ]
Conditions to Avoid:
   CONDITIONS TO AVOID – INSTABILITY: None; CONDITIONS TO AVOID – HAZARDOUS POLYMERIZATION: None
Incompatibilities with Other Materials:
   Oxidizing agents; alkali carbonates; (Al+PbO); Cs2C2; Cl2; CoF2; F2; IF5; MnF3; Rb2C2; FNO; AgF; NaK alloy; water and steam.
Hazardous Polymerization:
   Will occur [ ] Will not occur [ X ]
Hazardous Decomposition Products:
   Hydrogen gas
SECTION 8: Precautions For Safe Handling

Spill Cleanup Measures:
Wear appropriate respiratory and protective equipment specified in section VIII—control measures. 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 proper disposal. Take care not to raise dust.

Other Precautions:
None

HAZARD LABEL INFORMATION:
Store in cool, dry area Store in tightly sealed container Wash thoroughly after handling

Handling:
None

Storage:
None

Hygiene Practices:
WORK/HYGIENIC/MAINTENANCE PRACTICES: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. 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.

Waste Disposal:
Dispose of in accordance with local, state and federal regulations.

DOT:
DOT HAZARD LABEL: No data.
DOT UN Number:
1346

SECTION 9: Control Measures

Ventilation System:
Local exhaust ventilation may be necessary to control any air contaminants to within their PELs or TLVs during the use of this product. Good general ventilation is recommended.

Hand Protection Description:
Rubber gloves

Eye/Face Protection:
Safety glasses

Protective Clothing/Body Protection:
Protective gear suitable to prevent contamination

Respiratory Protection:
NIOSH — approved respirator

NIOSH approved respirator Impervious gloves Safety glasses Clothes to prevent skin contact

Ingredient Guidelines

Ingredient: Silicon

Guideline Information: ACGIH TLV: 10 mg/m3; OSHA PEL: 15 mg/m3; OTHER LIMITS: 5mg/m3 resp

SECTION 10: Other Information

Silicon:
Section 302:
No
Section 304:
No
Section 313 Toxic Release Form:
No

HMIS:
Health Hazard: 1
Fire Hazard: 0
Reactivity: 0
Personal Protection: E

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Comment:
SUPERCEDES REVISION 03/07/2002 OTHER HAZARD RATINGS: Health: 1 Flammability: 0 Reactivity: 0 Special Hazard: E Minimal:0 Slight: 1 Moderate:2 Serious: 3 Extreme: 4

Abbreviations used
NA=Not Applicable NE: Not Established

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