1 Identification of substance:

Product details:

Trade name: Silicon Lumps

Product numbers: 9720DG

Manufacturer/Supplier:
SkySpring Nanomaterials, Inc.
2935 Westhollow Dr., Houston, TX 77082, USA
Phone: 281-870-1700
Fax: 281-870-8002
Email: sales@ssnano.com

2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

Silicon (CAS# 7440-21-3), 99.99995%

Identification number(s):

EINECS Number: 231-130-8

3 Hazards identification

Emergency Overview

OSHA Hazards
No known OSHA hazards

HMIS Classification

Health Hazard: 1
Flammability: 0
Physical hazards: 0

NFPA Rating

Health Hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause
skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

4 **First aid measures**

**After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

**After skin contact**
Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

**After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing**
Seek immediate medical advice.

5 **Fire fighting measures**

**Flammable properties**
Flash point not applicable
Ignition temperature no data available

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special protective equipment for fire-fighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**
The product itself does not burn.

6 **Accidental release measures**

**Personal precautions**
Avoid dust formation.

**Environmental precautions**
Do not let product enter drains.

**Methods for cleaning up**
Sweep up and shovel. Keep in suitable, closed containers.
for disposal.

7 Handling and storage

Handling
Provide appropriate exhaust ventilation at places where dust is formed.

Storage
Keep container tightly closed in a dry and well-ventilated place.
Handle and store under inert gas.

8 Exposure controls and personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Silicon

<table>
<thead>
<tr>
<th></th>
<th>mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TLV</td>
<td>10</td>
</tr>
<tr>
<td>Belgium TWA</td>
<td>10</td>
</tr>
<tr>
<td>Denmark TWA</td>
<td>10</td>
</tr>
<tr>
<td>France TWA</td>
<td>10</td>
</tr>
<tr>
<td>Ireland TWA</td>
<td>5 (respirable); 10 (inhalable)</td>
</tr>
<tr>
<td>Netherlands TWA</td>
<td>10</td>
</tr>
<tr>
<td>Switzerland TWA</td>
<td>4</td>
</tr>
<tr>
<td>United Kingdom TWA</td>
<td>4 (respirable dust); 10 (total inhalable dust)</td>
</tr>
<tr>
<td>USA PEL</td>
<td>5 (respirable fraction); 15 (total dust)</td>
</tr>
</tbody>
</table>

Additional information: No data

Personal protective equipment

General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
**Breathing equipment:**
Use suitable respirator when high concentrations are present.

**Protection of hands:** Impervious gloves

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

### 9 Physical and chemical properties:

**Appearance**
Form Solid form

**Safety data**
- pH no data available
- Melting point 1,410 °C (2,570 °F)
- Boiling point 2,355 °C (4,271 °F)
- Flash point not applicable
- Ignition temperature no data available
- Lower explosion limit no data available
- Upper explosion limit no data available
- Density 2.33 g/mL at 25 °C (77 °F)
- Water solubility no data available

### 10 Stability and reactivity

**Appearance**
Form Solid form

**Safety data**
- pH no data available
- Melting point 1,410 °C (2,570 °F)
- Boiling point 2,355 °C (4,271 °F)
- Flash point not applicable
- Ignition temperature no data available
- Lower explosion limit no data available
- Upper explosion limit no data available
- Density 2.33 g/mL at 25 °C (77 °F)
- Water solubility no data available

### 11 Toxicological information

**Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
  - Oral: LD50: 3160 mg/kg (rat)
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Irritation of eyes:</strong> mild: 3 mg (rbt)</td>
<td></td>
</tr>
<tr>
<td><strong>Primary irritant effect:</strong></td>
<td></td>
</tr>
<tr>
<td>on the skin:</td>
<td>Irritant to skin and mucous membranes.</td>
</tr>
<tr>
<td>on the eye:</td>
<td>Irritating effect.</td>
</tr>
<tr>
<td><strong>Sensitization:</strong></td>
<td>No sensitizing effects known.</td>
</tr>
<tr>
<td><strong>Subacute to chronic toxicity:</strong></td>
<td>Elementary silicon is an inert material that seems to have little adverse effect on lungs and does not appear to produce significant organic disease or toxic effects when exposures are kept under reasonable control.</td>
</tr>
<tr>
<td><strong>Additional toxicological information:</strong></td>
<td>To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.</td>
</tr>
<tr>
<td><strong>12 Ecological information:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>General notes:</strong></td>
<td>Do not allow material to be released to the environment without proper governmental permits.</td>
</tr>
<tr>
<td><strong>13 Disposal considerations</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Product:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong></td>
<td>Consult state, local or national regulations for proper disposal.</td>
</tr>
<tr>
<td><strong>Uncleaned packagings:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong></td>
<td>Disposal must be made according to official regulations.</td>
</tr>
<tr>
<td><strong>14 Transport information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DOT (US)</strong></td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td><strong>IMDG</strong></td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>Not dangerous goods</td>
</tr>
</tbody>
</table>
### 15 Regulations

**OSHA Hazards**
No known OSHA hazards

**DSL Status**
All components of this product are on the Canadian DSL list.

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
Silicon  
CAS-No. 7440-21-3  
Revision Date 1991-07-01

**Pennsylvania Right To Know Components**
Silicon  
CAS-No. 7440-21-3  
Revision Date 1991-07-01

**New Jersey Right To Know Components**
Silicon  
CAS-No. 7440-21-3  
Revision Date 1991-07-01

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

### 16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other...
product or process, is the responsibility of the user.