SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Substance
Physical state: Solid
Substance name: FELDSPAR-POTASSIUM
Product code: SIF4906.0
Formula: (Na,K,Ca)AlO3Si
Synonyms: K-FELDSPAR, MICROCLINE
Chemical family: INORGANIC SILICATE

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture: Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.
11 East Steel Road
Morrisville, PA 19067
USA
T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST
info@gelest.com - www.gelest.com

GELEST INC.
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM
info@geleste.de - www.geleste.de

1.4. Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Carcinogenicity, Category 1A H350
Specific target organ toxicity — Repeated exposure, Category 2 H373
Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

Signal word (CLP): Danger
Hazard statements (CLP): H350 - May cause cancer.
H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP): P280 - Wear protective gloves/protective clothing/eye protection/face protection.
### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

<table>
<thead>
<tr>
<th>Substance type</th>
<th>Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FELDSPAR-POTASSIUM</td>
<td>12168-80-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feldspar-potassium</td>
<td>(CAS-No.) 12168-80-8</td>
<td>93 - 100</td>
<td>Not classified</td>
</tr>
<tr>
<td>Silica, crystalline (quartz)</td>
<td>(CAS-No.) 14808-60-7</td>
<td>0 - 7</td>
<td>Carc. 1A, H350, STOT RE 1, H372</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

| First-aid measures general | Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. |
| First-aid measures after inhalation | Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice. |
| First-aid measures after skin contact | Wash with plenty of water/…. Get medical advice/attention. |
| First-aid measures after eye contact | Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | Never give anything by mouth to an unconscious person. Get medical advice/attention. |

#### 4.2. Most important symptoms and effects, both acute and delayed

| Symptoms/effects | May cause cancer. Causes damage to organs through prolonged or repeated exposure. |
| Symptoms/effects after inhalation | May cause irritation to the respiratory tract. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. |
| Symptoms/effects after skin contact | May cause skin irritation. |
| Symptoms/effects after eye contact | May cause eye irritation. |
| Symptoms/effects after ingestion | No information available. |
| Chronic symptoms | Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis). |

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

| Suitable extinguishing media | Not combustible. |
| Unsuitable extinguishing media | None known. |

#### 5.2. Special hazards arising from the substance or mixture

| Fire hazard | None known. |

#### 5.3. Advice for firefighters

| Protection during firefighting | Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust. |
### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- **Protective equipment**: Wear protective equipment as described in Section 8.
- **Emergency procedures**: Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- **Protective equipment**: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

##### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

##### 6.3. Methods and material for containment and cleaning up

- **Methods for cleaning up**: Sweep or shovel spills into appropriate container for disposal.

##### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- **Precautions for safe handling**: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide local exhaust or general room ventilation to minimize exposure to dust.
- **Hygiene measures**: Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

- **Storage conditions**: Keep container tightly closed. Store locked up.
- **Incompatible materials**: None known.
- **Storage area**: Store in a well-ventilated place.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Control Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, crystalline (quartz) (14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>Italy - Portugal - USA</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA IDLH</td>
<td>US IDLH (mg/m³)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>Feldspar-potassium (12168-80-8)</td>
<td></td>
</tr>
<tr>
<td>Italy - Portugal - USA</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
</tbody>
</table>

#### 8.2. Exposure controls

- **Appropriate engineering controls**: Provide local exhaust or general room ventilation.

- **Personal protective equipment**: Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

- **Hand protection**: Neoprene or nitrile rubber gloves

- **Eye protection**: Safety glasses. Contact lenses should not be worn

- **Skin and body protection**: Wear suitable protective clothing

- **Respiratory protection**:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder.</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>278.33 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>Off-white.</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>No additional information available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 600 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not combustible</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.01 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.6</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>100 %</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
FELDSPAR-POTASSIUM
Safety Data Sheet

Germ cell mutagenicity: Not classified
Carcinogenicity: May cause cancer.
Limited evidence suggests that the crystalline silica component is a human carcinogen. This product contains a component that has been reported to be carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

<table>
<thead>
<tr>
<th>Silica, crystalline (quartz) (14808-60-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IARC group</strong></td>
</tr>
</tbody>
</table>

**Reproductive toxicity** : Not classified
**STOT-single exposure** : Not classified
**STOT-repeated exposure** : May cause damage to organs through prolonged or repeated exposure.
**Aspiration hazard** : Not classified
**Symptoms/effects after inhalation** : May cause irritation to the respiratory tract. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring.
**Symptoms/effects after skin contact** : May cause skin irritation.
**Symptoms/effects after eye contact** : May cause eye irritation.
**Symptoms/effects after ingestion** : No information available.
**Chronic symptoms** : Long-term inhalation of respirable crystalline silica can cause disabling lung disease (silicosis).

**SECTION 12: Ecological information**

**12.1. Toxicity**
**Acute aquatic toxicity** : Not classified
**Chronic aquatic toxicity** : Not classified

**12.2. Persistence and degradability**
No additional information available

**12.3. Bioaccumulative potential**
No additional information available

**12.4. Mobility in soil**
No additional information available

**12.5. Results of PBT and vPvB assessment**
No additional information available

**12.6. Other adverse effects**
No additional information available

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**
**Sewage disposal recommendations** : Do not dispose of waste into sewer.
**Product/Packaging disposal recommendations** : Landfill. Dispose in a safe manner in accordance with local/national regulations.
**Ecology - waste materials** : Avoid release to the environment.

**SECTION 14: Transport information**

**14.1. UN number**
In accordance with ADR / RID / IMDG / IATA / ADN

**14.1. UN number**
**UN-No. (ADR)** : Not applicable
**UN-No. (IMDG)** : Not applicable
**UN-No. (IATA)** : Not applicable
**UN-No. (ADN)** : Not applicable
**UN-No. (RID)** : Not applicable

**14.2. UN proper shipping name**
**Proper Shipping Name (ADR)** : Not applicable
**Proper Shipping Name (IMDG)** : Not applicable
**Proper Shipping Name (IATA)** : Not applicable
**Proper Shipping Name (ADN)** : Not applicable
**Proper Shipping Name (RID)** : Not applicable
14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
Not applicable

- Transport by sea
Not applicable

- Air transport
Not applicable

- Inland waterway transport
Not applicable

- Rail transport
Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions
FELDSPAR-POTASSIUM is not on the REACH Candidate List
FELDSPAR-POTASSIUM is not on the REACH Annex XIV List
FELDSPAR-POTASSIUM is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

% Volatiles : 100 %

15.1.2. National regulations
15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information : Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carc. 1A</td>
<td>Carcinogenicity, Category 1A</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity — Repeated exposure, Category 2</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer.</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

SDS EU (REACH Annex II) - Custom

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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