SAFETY DATA SHEET
according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1. Identification
Product identifier

Product name       SILK MICA

CAS-No.            12001-26-2

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

Details of the supplier of the safety data sheet

Supplier:
TKB TRADING, LLC
1101 9th Avenue
Oakland, CA 94606, USA
Telephone: +1 510 451 9011

SECTION 2. Hazards identification

GHS-Labeling
Not a dangerous substance according to GHS.

Other hazards
None known.

SECTION 3. Composition/information on ingredients

Formula          \[ K_2Al_5Si_3O_{10}(OH)_4 \]          \[ Al_5H_2K_2O_{2.5}Si_6 \] (Hill)
Molar mass               796.63 g/mol

Hazardous ingredients

Chemical Name (Concentration)
CAS-No.
mica (muscovite) (>= 90 % - <= 100 % )
12001-26-2

Exact percentages are being withheld as a trade secret.
SECTION 4. First aid measures

Description of first-aid measures

Inhalation
After inhalation: fresh air.

Skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eye contact
After eye contact: rinse out with plenty of water.

Ingestion
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
We have no description of any toxic symptoms.

Indication of any immediate medical attention and special treatment needed
No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

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

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture
Not combustible.
Ambient fire may liberate hazardous vapors.

Advice for firefighters

Special protective equipment for fire-fighters
In the event of fire, wear self-contained breathing apparatus.

Further information
none

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel:
Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:
Protective equipment see section 8.
Environmental precautions
No special precautionary measures necessary.

Methods and materials for containment and cleaning up
Observe possible material restrictions (see sections 7 and 10).
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling
Observe label precautions.

Conditions for safe storage, including any incompatibilities
Tightly closed. Dry.

Storage temperature: no restrictions.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Threshold limits</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Time Weighted Average</td>
<td>Form of exposure: Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA):</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>Time</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weighted</td>
<td></td>
<td>(TWA):</td>
<td>Form of exposure: Total dust.</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>15 mg/m³</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA):</td>
<td>Form of exposure: Total dust.</td>
</tr>
<tr>
<td></td>
<td>Time</td>
<td>50 millions of particles per cubic foot of air</td>
<td>50 millions of particles per cubic foot of air</td>
<td></td>
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<tr>
<td></td>
<td>Weighted</td>
<td></td>
<td>(TWA):</td>
<td>Form of exposure: Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>15 millions of particles per cubic foot of air</td>
<td>15 millions of particles per cubic foot of air</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA):</td>
<td>Form of exposure: Total dust.</td>
</tr>
<tr>
<td>OSHA_TRANS</td>
<td>PEL:</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td>Form of exposure: Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA):</td>
<td>Form of exposure: Total dust.</td>
</tr>
<tr>
<td></td>
<td>PEL:</td>
<td>15 mg/m³</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Time</td>
<td>10 mg/m³</td>
<td>10 mg/m³</td>
<td>Form of exposure: Inhalable particles.</td>
</tr>
<tr>
<td></td>
<td>Weighted</td>
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<td>(TWA):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>3 mg/m³</td>
<td>3 mg/m³</td>
<td>Form of exposure: Respirable particles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TWA):</td>
<td></td>
</tr>
</tbody>
</table>

Engineering measures
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.
Hygiene measures
Change contaminated clothing. Wash hands after working with substance.

Eye/face protection
Safety glasses

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection
required when dusts are generated.
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>light gray</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
| pH             | 7.0 - 10.0 at 100 g/l  
                 | 68 °F (20 °C) (slurry) |
| Melting point  | No information available. |
| Boiling point  | No information available. |
| Flash point    | Not applicable |
| Evaporation rate | No information available. |
| Flammability (solid, gas) | The product is not flammable. |
| Lower explosion limit | No information available. |
| Upper explosion limit | No information available. |
| Vapor pressure | No information available. |
| Relative vapor density | No information available. |
| Density        | 2.5 - 2.7 g/cm³  
                 | at 68 °F (20 °C) |
SECTION 10. Stability and reactivity

Reactivity
See below

Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions
no information available

Conditions to avoid
no information available

Incompatible materials
no information available

Hazardous decomposition products
no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure
Inhalation, Eye contact, Skin contact, Ingestion

Target Organs
Respiratory system

Specific target organ systemic toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard
Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC</td>
<td>No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</td>
</tr>
<tr>
<td>OSHA</td>
<td>No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.</td>
</tr>
<tr>
<td>NTP</td>
<td>No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.</td>
</tr>
<tr>
<td>ACGIH</td>
<td>No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.</td>
</tr>
</tbody>
</table>

Further information
The results of animal experiments using pigments of this type indicate no toxicologically relevant properties. Since the substance is poorly absorbed, no hazardous properties are to be anticipated. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions. The individual test results were as follows: skin tolerance (rabbit): no irritant effect; eye irritation test (rabbit): no irritant effect; sensitization test (guinea pig): no sensitizing potential; subchronic toxicity (rat): no findings up to 20,000 ppm. LD₅₀ (oral, rat): not determinable; all animals still alive after 15,000 mg/kg. Chronic toxicity (rat): 5% of the product added to the feed for a period of 2.5 years did not show any toxicological changes or carcinogenic effects in animals. The product did not show any genotoxic effects in the micronucleus test carried out in rats in concentrations of up to 2000 mg/kg (limit test). Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity
No information available.

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.
SECTION 13. Disposal considerations
The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

**Land transport (DOT)**
Not classified as dangerous in the meaning of transport regulations.

**Air transport (IATA)**
Not classified as dangerous in the meaning of transport regulations.

**Sea transport (IMDG)**
Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

**United States of America**

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

**Clean Water Act**
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

**DEA List I**
Not listed

**DEA List II**
Not listed

**US State Regulations**

**Massachusetts Right To Know**
*Ingredients*
mica (muscovite)

**Pennsylvania Right To Know**
*Ingredients*
mica (muscovite)
New Jersey Right To Know

Ingredients
mica (muscovite)

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

Notification status
TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

KOREA: Not in compliance with the inventory

SECTION 16. Other information

Training advice
Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet
Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date 03/03/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.