Section 1. Product and Company Identification

Product Name  Flavokawain A
Product ID  F4502
Chemical Name  
(Synonyms)

LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #  1-800-424-9300

Section 2. Hazards Identification

GHS Classification  
Skin corrosion/irritation (Category 2), H315 
Serious eye damage/eye irritation (Category 2), H319 
Specific target organ systemic toxicity - single exposure (Category 3), H335

GHS Label elements including precautionary statements

Pictogram  
Signal word  Warning
Hazard and precautionary statements  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

Precautionary statements  
P261 - Avoid breathing dust, fumes, gas, mist, vapors, spray.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/eye protection/face protection.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P321 - Specific treatment (see supplemental 1st aid instructions on this label).  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P337 + P312 - Take off contaminated clothing and wash before reuse.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up  
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification  
Health hazard: 2  
Chronic health hazard:  *  
Flammability: 0  
Physical hazard: 0

NFPA Rating  
Health hazard: 2  
Fire hazard: 0  
Reactivity hazard: 0

Potential Health Effects  
Inhalation: May cause irritation of respiratory tract.  
Skin: Causes skin irritation.  
Eyes: Causes serious eye irritation.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>CAS No.</th>
<th>Formula Wt.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C₁₈H₁₈O₅</td>
<td>64680-84-8</td>
<td>314.33</td>
<td></td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact
Flush eyes with plenty of water for at least 15 minutes and seek medical attention immediately.

Skin Contact
Wash with soap and water for 15 minutes and seek medical attention immediately. Wash contaminated clothing before use.

Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion
Rinse mouth with water. Contact a physician or poison control immediately. Consult a physician.

Section 5. Firefighting Measures

Flash Point
Not available.

Extinguishing Media
Water spray, alcohol-resistant foam, dry chemical powder, and carbon dioxide.

Firefighting Procedures
Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards
May emit toxic fumes.

Section 6. Accidental Release Measures

Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions
Do not let product enter drains.

Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Wear gloves, goggles, and lab coat when handling this material. Use in a well ventilated area. Use only in a chemical fume hood. Wash thoroughly after handling material.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20˚C.

Hazardous Decomposition Products
Carbon monoxide, carbon dioxide.

Other Remarks
None.
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values.
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**PERSONAL PROTECTION**

**Eye protection:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Skin and body protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>Yellow crystalline powder.</td>
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<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Volatility</th>
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<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Density</th>
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<tbody>
<tr>
<td>112-116°C</td>
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</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO 100 mM. Insoluble in water. Soluble in methanol.</td>
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</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Ignition temperature</th>
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</thead>
<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Lower explosion limit</th>
<th>Auto ignition temperature</th>
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</thead>
<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Vapor pressure</th>
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</thead>
<tbody>
<tr>
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<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insoluble in water.</td>
<td>Not available.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Evaporation rate</th>
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</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
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</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**

Stable

**Materials To Avoid**

Not available.

**Hazardous Decomposition Products**

Carbon monoxide, carbon dioxide.
Section 11. Toxicological Information

Oral LD50  Not available
Inhalation LC50  Not available
Dermal LD50  Not available
Other information on acute toxicity  Not available
Skin corrosion/irritation  Not available
Serious eye damage/irritation  Not available
Respiratory or skin sensitization  Not available
Germ cell mutagenicity  Not available
Reproductive Toxicity  Not available
Aspiration Hazard  Not available
Synergistic effects  Not available
Additional Information  Not available
Teratogenicity  Not available
Signs and symptoms of exposure  Not available

Potential Health Effects
Inhalation: May cause irritation of respiratory tract.
Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
Ingestion: May cause irritation to mucous membranes.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

Toxicity  Not available.
Mobility in soil  Not available.
PBT and vPvB assessment  Not available.
Persistence and degradability | Not available. | Other adverse effects | Not available.

Bioaccumulative potential | Not available.

Section 13. Disposal Considerations
Waste Disposal
Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed professional disposal company to dispose of as unused product.

Section 14. Transport Information

DOT (US) | Not dangerous goods. |
IATA | Not dangerous goods. |
IMDG | Not dangerous goods. |

Further Information | None. |

Section 15. Regulatory Information

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title II, 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 Components
No SARA Hazards

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
Flavokawain A CAS #: 64680-84-8 Revision Date:

New Jersey Right To Know Components
Flavokawain A CAS #: 64680-84-8 Revision Date:

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

Section 16. Other Information
Other information
The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.