SAFETY DATA SHEET
Cat# 2320-50, -100, -1000, -1EA, Sulfo-SMCC

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sulfo-SMCC
PRODUCT CODES: Cat# 2320-50, -100, -1000, -1EA
MANUFACTURER: BioVision, Inc.
DIVISION: 
ADDRESS: 155 South Milpitas Blvd., Milpitas, CA 95035
EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE: 800-424-9300
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Product Name/Chemical Name</th>
<th>Description</th>
<th>Volume</th>
<th>Safety Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfo-SMCC</td>
<td>Solid</td>
<td>2320-50: 50 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2320-100: 100 mg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2320-1000: 1 g</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2320-1EA: 1 set (10 x 2 mg)</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The safety data shown below is based on pure ingredients: The amounts in this kit are far less.

SECTION 3: HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>EC-No.</th>
<th>Molecular Weight</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfo-SMCC</td>
<td>92921-24-9</td>
<td>--</td>
<td>436.37</td>
<td>C\text{\textsubscript{16}}H\text{\textsubscript{17}}N\text{\textsubscript{2}}NaO\text{\textsubscript{9}}S</td>
</tr>
</tbody>
</table>

Sulfo-SMCC:
Emergency Overview
OSHA Hazards: Irritant
GHS Classification:
- Eye irritation (Category 2A)
- Skin irritation (Category 2)
- Specific target organ toxicity – single exposure (Category 3)

GHS Label elements, including precautionary statements
Pictogram:

Signal word: Warning
Hazard statement(s):
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

Precautionary statement(s):
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P263 Avoid contact during pregnancy/while nursing.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/eye protection/face protection.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 IF IN SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim 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.
- P332+P313 If skin irritation persists: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.

HMIS Classification
- Health hazard: 2
- Flammability: 0
- Physical hazards: 0

NFPA Rating
- Health Hazard: 2
- Fire: 0
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. Causes skin irritation.
- Eyes: Causes eye irritation.
- Ingestion: May be harmful if swallowed.
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. If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact: Wash off with soap and plenty of water. Consult a physician. In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES


SECTION 6: ACCIDENTAL RELEASE MEASURES


SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values. Personal protective equipment: Respiratory protection: For nuisance exposure use typ P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (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. Eye protection: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin and body protection: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Sulfo-SMCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>White to off-white solid</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>&gt;10 mg/ml</td>
</tr>
<tr>
<td>Other Solubility:</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Ignition Temperature (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Density:</td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Sulfo-SMCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability:</td>
<td>Stable under recommended storage conditions</td>
</tr>
<tr>
<td>Conditions to avoid:</td>
<td>No data available</td>
</tr>
<tr>
<td>Materials to avoid:</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products:</td>
<td>Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION

Sulfo-SMCC:

Acute toxicity: not available
Skin corrosion/Irritation: no data available
Serious eye damage/eye irritation: no data available
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data available
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.
Reproductive toxicity: no data available
Teratogenicity: no data available
Specific target organ toxicity – single exposure (GHS): no data available
Specific target organ toxicity – repeated exposure (GHS): no data available
Aspiration hazard: no data available
Potential Health Effects
  Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
  Skin: May be harmful if absorbed through skin. Causes skin irritation.
  Eyes: Causes eye irritation.
  Ingestion: May be harmful if swallowed.
Signs and Symptoms of Exposure: To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated.
Additional information: RTECS: not available

SECTION 12: ECOLOGICAL INFORMATION

Sulfo-SMCC:

Persistence and degradability: no data available
Toxicity: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Sulfo-SMCC:

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

SECTION 15: REGULATORY INFORMATION

Sulfo-SMCC:

OSHA Hazards: Irritant
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) reported levels established by SARA Title III, Section 313.
EU regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>Risk Phrases</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfo-SMCC</td>
<td>R36/37/38</td>
<td>S26</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

DISCLAIMER:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.