Material Safety Data Sheet

Section 1 - Product and Company Information

Product Name: Actero™ Demi Fraser Broth - Dehydrated Culture Media
Catalog Number:
- FCM-163 ActeroTM Demi Fraser Broth (500 G)
- FCM-162 ActeroTM Demi Fraser Broth (2 KG)
- FCM-161 ActeroTM Demi Fraser Broth (10 KG)
Manufacturer: FoodChek Systems
Address: 1414 8th Street S.W.
Calgary, Alberta, Canada, T2R 1J6
Phone: (403) 263-6357
(877) 298-0208

Section 2 - Composition / Information on Ingredients

Chemical Characterization:
Description: This product is a mixture of the substances listed below along with nonhazardous additions. Any other hazardous ingredients within the product not listed below, are at concentrations lower than the regulatory threshold limits specified by 29 CFR 1910.1200.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>7447-41-8</td>
<td>Lithium Chloride</td>
</tr>
<tr>
<td>7647-14-5</td>
<td>Sodium Chloride</td>
</tr>
<tr>
<td>531-75-9</td>
<td>Esculin</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Hazard Overview: Causes irritation in case of eye contact, ingestion or inhalation. May cause skin irritation.

NFPA Rating
- Health - 1
- Fire - 0
- Reactivity - 0
### Section 4 - First Aid Measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Advice/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Advice</td>
<td>Consult a physician. Show this safety data sheet to the doctor in attendance.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Never give anything by mouth to an unconscious person. Consult a physician.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Wash off with soap and plenty of water. Consult a physician.</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.</td>
</tr>
</tbody>
</table>

### Section 5 - Fire Fighting Measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable Extinguishing Media</td>
<td>Use water spray, carbon dioxide, dry chemical powder or alcohol resistant foam.</td>
</tr>
<tr>
<td>Protective Equipment</td>
<td>Wear protective clothing and self-contained breathing apparatus for firefighting if necessary.</td>
</tr>
</tbody>
</table>

### Section 6 - Accidental Release Measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Precautions</td>
<td>Use personal protective equipment. Avoid dust formation or breathing vapor’s, mist or gas. Ensure adequate ventilation. Avoid breathing dust.</td>
</tr>
<tr>
<td>Methods for Clean Up</td>
<td>Pick up and arrange disposal without crating dust. Wipe up with a damp sponge and transfer to suitable closed containers for disposal.</td>
</tr>
</tbody>
</table>

### Section 7 - Handling and Storage

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Handling</td>
<td>Avoid contact with shin or eyes. Avoid formation of dust or aerosols. Provide appropriate exhaust ventilation at locations where dust is formed.</td>
</tr>
<tr>
<td>Storage</td>
<td>Keep container tightly closed in a cool dry place in accordance with specified storage conditions.</td>
</tr>
</tbody>
</table>
Section 8 - Exposure Controls and Personal Protection Equipment

Personal protective equipment
Respiratory protection
For nuisance exposures use type 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 the workday.

Section 9 - Physical and Chemical Properties

Appearance
Physical State: Powder
Color: Medium to light beige

Safety Data
pH: 7.2 +/- 0.2
Boiling Point: No data available
Melting Point: No data available
Flash Point: No data available
Ignition Temperature: No data available
Auto igniting Temp: No data available
Explosion Limits: No data available
Vapor Pressure: No data available
Density: No data available
Odor: Distinct
Solubility: Soluble
Section 10 - Stability and Reactivity

Stability: Stable under recommended storage conditions
Materials to be Avoided: Strong oxidizing agents.
Decomposition Products: Hazardous products formed under fire conditions; Carbon oxides, nitrogen oxides, hydrogen chloride gas, sodium oxides, lithium oxides. Other Decomposition products; no data available

Section 11 - Toxicological Information

Skin Contact: Irritating to the skin and mucous membranes.
Eye Contact: Irritating effect.
Ingestion: May cause irritation by ingestion.
Inhalation: May cause irritation by inhalation.
Sensitization: Not available
Target Organs: Not available
Additional toxicological information: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Toxicity Data: LD/Lc50 values that are relevant for classification
7447-41-8 Lithium Chloride
Oral LD50 526 mg/kg (rat)
7647-14-5 Sodium Chloride
Oral LD50 3000 mg/kg (rat)
531-75-9 Esculin
Not available

Section 12 - Ecological Information

Toxicity: No data available
General Information: No data available
Section 13 - Disposal Considerations

Waste Disposal: Dispose of in accordance with applicable state and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. This product is not considered a RCRA hazardous waste.

Section 14 - Transport Information

DOT (US): Not a dangerous good
IATA: Not a dangerous good

Section 15 - Regulations

Warning Label Text
Indication of Hazard: IRRITANT, HARMFUL BY INGESTION
Risk Statements: Irritating to eyes, skin and respiratory system. Harmful if swallowed.
Safety Statements: Avoid contact or inhalation. Refer to MSDS.

Carcinogenicity
NTP: No
IARC: No
OSHA: No

Section 16 - Other Information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. These suggestions should not be confused with state, municipal or insurance requirements, and constitute No Warranty. Microbiology International or FoodChek Systems Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.