1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MicroC® 2000
Publication Date: May 31, 2015
Product Code: NA
Replaces: February 26, 2015
Product Use: A reducing agent for biological processes

Supplier Information:
Environmental Operating Solutions, Inc
160 MacArthur Blvd., Unit 6, Bourne, MA 02532
Phone: 508-743-8440
Fax: 508-743-8443
Website: www.microc.com

EMERGENCY TELEPHONE NUMBER: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status:
This product when used as intended is not hazardous according to 29 CFR 1910.1200

Note: When vaporized, glycerin mist may cause irritation of the respiratory tract.

Potential Health Effects

<table>
<thead>
<tr>
<th>Routes of Exposure</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>May cause slight irritation</td>
</tr>
<tr>
<td>Skin</td>
<td>May cause slight irritation</td>
</tr>
<tr>
<td>Inhalation</td>
<td>High mist concentrations may cause irritation of respiratory tract.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed in large quantities</td>
</tr>
</tbody>
</table>

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin; glycerol</td>
<td>56-81-5</td>
<td>70-74%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>22-26%</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>4-6%</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Eye Contact
Immediately flush eyes thoroughly with plenty of water for 15 minutes and consult a physician immediately.

Skin Contact
Remove contaminated clothing and wash affected area with water and soap. Consult physician if irritation develops.

Inhalation
Remove individual to fresh air. Seek medical attention if breathing problems persist.

Ingestion
Do not induce vomiting. Rinse mouth thoroughly. Seek medical attention.

General Advice
If individual feels unwell following the exposure to the product consult a physician immediately. Present this Safety Data Sheet to the doctor in attendance.

Note to physician
Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA and NFPA)
Non-flammable Material

Protection of Firefighters:
Wear suitable protective equipment. Wear self contained breathing apparatus if necessary.

Extinguishing Media
Use equipment appropriate to the main source of the fire. Water spray, alcohol foam, dry chemical or CO2. Water or alcohol foam may cause frothing.

Specific hazards arising from the chemical
Carbon oxides

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Spills
Keep unnecessary personnel away from spill. Use personal protective equipment. Ventilate area of leak or spill. Avoid breathing vapors and mist.

Methods for Containment
Eliminate all sources of ignition. Stop flow of material if safe to do so. Dike spilled material. Absorb spill with inert absorbent material. Sand, earth and vermiculite are suitable absorbent materials.

Environmental Precautions
Prevent further leakage. Contain spill if safe to do so. Do not let product enter storm drains if possible.

7. HANDLING AND STORAGE

Precautions for Safe Handling
See other relevant sections of this SDS. Avoid contact with skin and eyes. Avoid breathing mist. Use with adequate ventilation. Do not handle and store near open flames, high heat or sources of ignition.

Storage
Keep containers closed when not in use. Minimize evaporative losses. Keep away from ignition sources.

Incompatible Materials for Storage
None known
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

INSUFFICIENT DATA ON MIXTURE. DATA ON INDIVIDUAL COMPONENTS PROVIDED BELOW

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration in Product</th>
<th>ACGIH TLV</th>
<th>OSHA TABLE Z-1 Limits for Air Contaminants</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>70-74% w/w</td>
<td>Form: Glycerin Mist   TWA: 10 mg/m³</td>
<td>Form: Total Dust PEL: 15 mg/m³</td>
<td>Insufficient Data on Glycerin Mist</td>
</tr>
<tr>
<td>CAS No: 56-81-5</td>
<td></td>
<td></td>
<td>Form: Respirable Fraction PEL: 5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>&lt; 1 % w/w</td>
<td>TWA: 260 mg/m³</td>
<td>PEL: 260 mg/m³</td>
<td>TWA: 260 mg/m³</td>
</tr>
<tr>
<td>CAS No: 67-56-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls
Use proper equipment and storage conditions to control airborne levels below recommended exposure limits.

Personal Protective Equipment

Eye Protection: Use normal eye protection practices such as safety glasses with side shields. Use chemical goggles if risk of splashing is high.

Skin Protection Handle with chemical resistant gloves. Dispose of contaminated gloves after use. Nitrile gloves recommended.

Respiratory Protection If workers could be exposed to concentrations above the exposure limits in Section 8, use a full face respirator with multipurpose combination cartridges.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td>Flash Point</td>
<td>None to Boil (ASTM D93)</td>
</tr>
<tr>
<td>Color</td>
<td>Light brown</td>
<td>Boiling Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Odor</td>
<td>Musty – Sweet Odor</td>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td>UEL/LEL</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>4.00-11.00</td>
<td>Flammability (solid, gas)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Highly soluble in water</td>
<td>Vapor Pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>10.22 lbs/gal</td>
<td>Vapor Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.225@ 20°C</td>
<td>Relative Density</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>45 cPs @ 20C</td>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Autoignition Temperatures</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decomposition Temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10.  STABILITY AND REACTIVITY

Reactivity
Avoid contact with oxidizing agents (e.g. nitric acid, peroxides, chromates)

Chemical Stability
Stable under normal storage conditions

Possibility of hazardous reactions
None known

Conditions to Avoid
Heat, flames, sparks. Contact with oxidizing agents

Incompatible Materials
None known

Hazardous Decomposition Products
Oxides of carbon under high heat

11. TOXICOLOGY

INSUFFICIENT DATA ON MIXTURE. DATA ON INDIVIDUAL COMPONENTS PROVIDED BELOW

Eye Contact
The components in this product may result in mild eye irritation from contact with liquid or vapors. Symptoms include redness, swelling, watering.

Skin Contact
The components in this product may result in mild skin irritation. Symptoms include redness, itching, burning, dermatitis.

Inhalation
Breathing high mist concentrations may be harmful. Inhalation can cause irritation of the throat and lungs.

Ingestion
Ingestion of this product may result in nausea, vomiting and diarrhea. Aspiration into the lungs can cause damage and inflammation to the lungs.

Target Organs
Lungs, Kidneys

Prolonged Exposure
Symptoms include nausea, headache, vomiting

Glycerin; Glycerol CAS No. 56-81-5

Acute Toxicity
Dermal LD50 = > 10,000 mg/kg (Rabbit)
Inhalation LC50 = > 570 mg/m³ 1 hr (Rat)
Oral LD50 = 12,600 mg/kg (Rat)

Carcinogenicity
Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

Mutagenicity
No data available

Reproductive Toxicity
No data available

Methanol 67-56-1

Acute Toxicity
Dermal LD50 = 15,800 mg/kg (Rabbit)
Inhalation LC50 = 64,000 mg/m³ 4 hr (Rat)
Oral LD50 = 5,600 mg/kg (Rat)

Carcinogenicity
Not listed by ACGIH, IARC, NIOSH, NTP or OSHA

Mutagenicity
No data available

Reproductive Toxicity
No data available
12. ECOLOGICAL INFORMATION

Ecotoxicity

Glycerin: 96 hr LC50: 51,000-57,000 mg/L (Rainbow Trout), > 5000 mg/L Goldfish
Methanol: 96 hr LC50: > 15,400-29,400 mg/L (Fish)

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

This product as supplied is not classified as a RCRA hazardous waste according to 40 CFR 261. However it should be fully characterized prior to disposal as contamination with other materials may subject it to hazardous waste regulations. RCRA requires the user of the product to determine whether the product meets RCRA criteria for hazardous waste. Always consult with local, state and federal regulations prior to disposal.

14. TRANSPORTATION INFORMATION

US Domestic DOT
Not Regulated

Shipping Name
Glycerin; Glycerol

IMDG
Not dangerous goods

IATA
Not dangerous goods

Marine pollutant
No

15. REGULATORY INFORMATION

United States

Toxic Substances Control Act
The components of this product are listed on the TSCA Inventory of Existing Chemical Substances

Section 302 (EHS) TPQ
Not applicable

Section 304 (EHS) TPQ
Not applicable

SARA Section 311/312 Hazard Categories
Acute - NO
Chronic – NO
Physical - None
Pressure Hazard - NO
Fire Hazard - NO
SARA Section 313
This product may contain trace amounts of a chemical that is subject to reporting requirements of SARA
Methanol  CAS # 67-56-1  Typical % Weight in Product  0.0-0.10%

CERCLA
This product may contain trace amounts of a chemical that is subject to reporting requirements of CERCLA
Methanol RQ # 5,000.  Typical % Weight in Product 0.0-0.10%

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):  None

State Right to Know Regulations

Chemical Name: Glycerin
California – Proposition 65       Not applicable
Massachusetts Right to Know      Glycerin
Minnesota Hazardous Substances List Glycerin mist
New Jersey Right to Know         None
Pennsylvania Right to Know       Glycerin
Rhode Island Right to Know      Glycerin

16. ADDITIONAL INFORMATION

MSDS REVISION STATUS:  May 31, 2015| Replaces February 26, 2015

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA
HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.  THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED
TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. WE BELIEVE
THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF ITS PUBLICATION DATE, BUT MAKE NO WARRANTY
THAT IT IS. IF THIS MSDS IS MORE THAN THREE YEARS OLD YOU SHOULD CONTACT THE SUPPLIER TO MAKE CERTAIN
THAT THE INFORMATION IS CURRENT.