MicroC[®] 20





1. PRODUCT AND COMPANY IDENTIFICATION

MicroC® 2000 **Product Name: Publication Date:** March 11, 2019

Product Code: NA Replaces: March 6, 2018

Product Use: A reducing agent for biological processes

Supplier Information:

Environmental Operating Solutions, Inc. Phone: 508-743-8440 160 MacArthur Blvd., Unit 6 Fax: 508-743-8443 Bourne, MA 02532 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 This product when used as intended is not hazardous according to GHS categories

> **GHS Pictograms:** None Applicable None Applicable **Signal Word:** GHS Hazard Classification: None Applicable **Hazard Statements:** None Applicable

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

Potential Health Effects

Routes of Exposure Ingestion, inhalation, skin contact, eye contact

Eyes May cause slight irritation Skin May cause slight irritation

Inhalation High mist concentrations may cause irritation of respiratory tract.

Ingestion May be harmful if swallowed in large quantities

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	% by Weight
Glycerin; glycerol	56-81-5	70-74%
Water	7732-18-5	22-26%
Sodium Chloride	7647-14-5	4-6%
Methanol	67-56-1	< 1%

Safety Data Sheet

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 MediaUse 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

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

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

Physical State	Liquid	Flash Point	None to Boil (ASTM D93)
Color	Light brown	Boiling Point	Not determined
Odor	Musty – Sweet Odor	Evaporation Rate	Not determined
Odor Threshold	Not determined	UEL/LEL	Not determined
		Flammability (solid, gas)	Not determined
рН	4.00-11.00	Vapor Pressure	Not determined
Solubility in Water	Highly soluble in water	Vapor Density	Not determined
		Relative Density	Not Determined
Bulk Density	10.22 lbs/gal	Partition Coefficient	Not determined
Specific gravity	1.225@ 20°C	Autoignition Temperatures	
		Decomposition	
Viscosity	45 cPs @ 20C	Temperature	Not determined

10. STABILITY AND REACTIVITY

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

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

No data available Mutagenicity No data available **Reproductive Toxicity**

Methanol 67-56-1

Acute Toxicity Dermal LD50 = 15,800 mg/kg (Rabbit)

Inhalation LC50 = $64,000 \text{ mg/m}^3 4 \text{ hr (Rat)}$

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

Bioaccumulative potential

Mobility in soil

Other adverse effects

No data available

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

Safety Data Sheet

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 KnowNonePennsylvania Right to KnowGlycerinRhode Island Right to KnowGlycerin

16. ADDITIONAL INFORMATION

SDS REVISION STATUS: March 11, 2019 | Replaces: March 6, 2018

THIS SAFETY DATA SHEET (SDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS SDS 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 SDS IS MORE THAN THREE YEARS OLD YOU SHOULD CONTACT THE SUPPLIER TO MAKE CERTAIN THAT THE INFORMATION IS CURRENT.