

MicroC® 4475

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MicroC® 4475 **Publication Date:** January 15, 2021
Product Code: NA **Replaces:** March 11, 2019
Product Use: A reducing agent for biological processes

Supplier Information:

Environmental Operating Solutions, Inc Phone: 508-743-8440
 53 Portside Drive Fax: 844-308-5537
 Pocasset, MA 02559 Website: www.microc.com

EMERGENCY TELEPHONE NUMBER: **CHEMTREC** **800-424-9300**

USE OF THIS PRODUCT FOR WATER TREATMENT IS PROTECTED BY UNITED STATES PATENT #7,144,509/ CANADIAN PATENT #2,476,025

2. HAZARDS IDENTIFICATION

Hazard Statement: WARNING !

May cause skin and eye irritation

OSHA and GHS Classification Category: Skin – Category 2 Eye – Category 2B

Precautionary Statement:

Wear protective gloves/eye protection. Avoid breathing dust/mist. Wash affected areas with water. Seek medical attention if irritation persists. Dispose of contents/containers in accordance with local, state and federal regulations.



Potential Health Effects

Routes of Exposure	Ingestion, inhalation, skin contact, eye contact
Eyes	May cause minor irritation
Skin	May cause minor irritation
Inhalation	None known
Ingestion	May be harmful if swallowed in large quantities

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	% by Weight
Trade Secret	NA	40-60%
Water	7732-18-5	40-60%
Urea	57-13-6	8-12%
Phosphoric Acid	7664-39-2	0-3%
Sodium Hydroxide	1310-73-2	0-3%

*** The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret according to OSHA 1910.1200 Appendix E.**

Safety Data Sheet

4. FIRST AID MEASURES

Eye Contact	Immediately flush eyes thoroughly with plenty of water for 15 minutes while holding eyelids apart.
Skin Contact	Remove contaminated clothing and wash affected area with water and soap.
Inhalation	Remove individual to fresh air.
Ingestion	Immediately drink water to dilute. Never give anything to an unconscious person. 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.
Specific hazards arising from the chemical	None

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Spills	Keep unnecessary personnel away from spill. Use personal protective equipment; gloves and eye protection recommended. Ventilate area of leak or spill.
Methods for Containment	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. 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. Avoid storage in extreme temperatures and in direct sunlight.
Incompatible Materials for Storage	Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

This product contains water and components whose specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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
Trade Secret	40-60% w/w	No occupational exposure limits established	No occupational exposure limits established	No occupational exposure limits established
Urea CAS No: 57-13-6	8-12% w/w			TWA: 10 mg/m3
Phosphoric Acid CAS No: 7664-38-2	0-3% w/w		PEL: 1 mg/m3	TWA: 1 mg/m3
Sodium Hydroxide CAS No: 1310-73-2	0-3% w/w		PEL: 2 mg/m3	TWA: 2 mg/m3

Engineering Controls

None required other than preventing direct contact with product.

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

Follow good industrial hygiene practices.

Respiratory Protection

Not required under foreseeable conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Flash Point	None to Boil (ASTM D93)
Color	Clear/Yellow Liquid	Boiling Point	~ 215°F
Odor	Mild soap odor	Evaporation Rate	Not determined
Odor Threshold	Not determined	UEL/LEL	Not determined
		Flammability (solid, gas)	Not determined
pH	3.0 – 5.5	Vapor Pressure	Not determined
Solubility in Water	100%	Vapor Density	Not determined
		Relative Density	Not Determined
Bulk Density	10.26 – 10.34 lbs/gal	Partition Coefficient	Not determined
Specific gravity	1.23 – 1.24 @ 20°C	Autoignition Temperatures	Note determined
Viscosity	20 cPs @ 20C	Decomposition Temperature	Not determined

10. STABILITY AND REACTIVITY

Reactivity	Avoid contact with oxidizing agents
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	None known

11. TOXICOLOGY

Eye Contact	The components in this product may result in mild eye irritation from contact with liquid. 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	None known.
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	None known
Prolonged Exposure	None known

Component	Concentration in Product	Acute Toxicity	Carcinogenicity	Mutagenicity	Reproductive Toxicity
Trade Secret	40-60% w/w	Not acutely toxic	Not listed by ACGIH, IARC, NIOSH, NTP, OSHA	No data available	No data available
Urea CAS No: 57-13-6	8-12% w/w	Oral LD50 = 14,300-15,000 mg/kg Inhalation – no data Dermal – no data	Not listed by ACGIH, IARC, NIOSH, NTP, OSHA	No data available	No data available
Phosphoric Acid CAS No: 7664-38-2	0-3% w/w	Dermal LD50 = >1260-3160 mg/kg (Rabbit) Inhalation LC50 = 61-1689 mg/m ³ 1 hr (Mouse, rat, rabbit) Oral LD50 = 1530 mg/kg (Rat)	Not listed by ACGIH, IARC, NIOSH, NTP, OSHA	No data available	No data available
Sodium Hydroxide CAS No: 1310-73-2	0-3% w/w	Dermal LD50 = 12,894 mg/kg (Rabbit) Inhalation LC50 = Not Available Oral LD50 = > 90,000 mg/kg (Rabbit)	Not listed by ACGIH, IARC, NIOSH, NTP, OSHA	No data available	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information found
Persistence and degradability	Rapidly biodegradable
Bioaccumulative potential	No data available
Mobility in soil	Soluble in water
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 Shipment of this product is not controlled by ICAO, USDOT or Canadian
Shipping Name	TDG regulations
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

<u>SARA Section 313</u>	Not applicable
<u>CERCLA</u>	Not applicable
<u>Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):</u>	None
<u>State Right to Know Regulations:</u>	No ingredients listed with any state.

16. ADDITIONAL INFORMATION

SDS REVISION STATUS: January 15, 2021 | Replaces: March 11, 2019

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.