

MicroC[®] 4175

1. PRODUCT AND SUPPLIER INFORMATION

Product Name: MicroC[®] 4175 **Publication Date:** August 7, 2026
Product Code: NA **Replaces:** January 15, 2021
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

EMERGENCY OVERVIEW

GHS Classification in accordance with OSHA Hazard Communication Standard (29 CFR 1920.1200)

Skin - Category 2

Eye - Category 2B

Pictogram:



Signal Word:

WARNING

Hazard Statement(s):

H315: Causes skin irritation

H319: May cause eye irritation

Hazard Summary

	NFPA	HMIS
Health Hazard	1	1
Flammability	0	0
Reactivity	0	0
Specific Hazard	None	None

Precautionary Statement(s):

P261: Avoid breathing dust/fume/gas/mist/vapors/spray

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P353: If on skin: Rinse skin with water/shower

P305_P351+P338: If in eyes: Rinse cautiously with water for several minutes; remove contact lenses if easy to do; continue rinsing

P332+P337+P313: If skin irritation occurs: If eye irritation persists; Get medical advice/attention

P501: Dispose of contents and containers in accordance with local regulations

SAFETY DATA SHEET

Potential Health Effects

Routes of Exposure	Ingestion, inhalation, skin contact, eye contact
Eyes	May cause slight irritation
Skin	May cause slight irritation
Inhalation	May cause slight irritation
Ingestion	May be harmful if swallowed in large quantities

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS Number	Concentration by Weight %
Trade Secret	n/a	40-60%
Water	7732-18-5	40-60%
Urea	57-13-6	4-12%
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.

4. FIRST AID

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.

If inhaled

Remove individual to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Remove contaminated clothing and wash affected area with water and soap.

In case of eye contact

Immediately flush eyes thoroughly with plenty of water for 15 minutes while holding eyelids apart.

If swallowed

Immediately drink water to dilute. Rinse mouth thoroughly. Never give anything to an unconscious person. Seek medical attention if discomfort or vomiting.

SAFETY DATA SHEET

5. FIRE FIGHTING MEASURES

Conditions of flammability

Non-flammable Material

Suitable extinguishing media

Use equipment appropriate to the main source of the fire. Water spray, alcohol foam, dry chemical or CO2.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with eyes, skin, clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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

Environmental precautions

Prevent further leakage. Contain spill if safe to do so. Do not let product enter sewers, storm drains, or waterways if possible.

Methods and materials for containment and cleaning up

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.

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.

Conditions for safe storage

Keep away from ignition sources. Store away from incompatible materials including oxidizing agents. Avoid storage in extreme temperatures and direct sunlight.

SAFETY DATA SHEET

8. EXPOSURE CONTROLS AND 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	4-12% 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

Respiratory protection

Not required under foreseeable conditions of use.

Hand protection

Handle with chemical-resistant 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

Standard safety glasses with side shields. Use chemical goggles if risk of splashing is high. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Follow good industrial hygiene practices.

Hygiene measures

Avoid contact with skin, eyes, and clothing. Keep away from food and drink. Wash hands before breaks and immediately after handling the product.

SAFETY DATA SHEET

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 – 10.59 lbs/gal	Partition Coefficient	Not determined
Specific gravity	1.23 – 1.27 @ 20°C	Autoignition Temperatures	Not determined
Viscosity	20 cPs @ 20C	Decomposition Temperature	Not determined

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None known.

Conditions to avoid

Heat, flames, sparks.

Materials to avoid

Contact with oxidizing agents.

Hazardous decomposition products

None known.

SAFETY DATA SHEET

11. TOXICOLOGICAL INFORMATION

INSUFFICIENT DATA ON MIXTURE. DATA ON INDIVIDUAL COMPONENTS PROVIDED BELOW

Component	WEIGHT %	Acute Toxicity
Trade Secret	40-60% w/w	Not acutely toxic
Urea 57-13-6	4-12% w/w	Oral LD50 = 14,300-15,000 mg/kg Inhalation – no data Dermal – no data
Phosphoric Acid 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)
Sodium Hydroxide 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)

Carcinogenicity

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

Mutagenicity

Data not available

Reproductive Toxicity

Data not available

Potential health effects

Inhalation

Not known to be an inhalation hazard.

Ingestion

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

Skin

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

Eyes

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

Prolonged Exposure

Not known to be a hazard.

SAFETY DATA SHEET

12. ECOLOGICAL INFORMATION

Toxicity

No data available

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

Product

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.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORTATION INFORMATION

DOT (US)

Not Regulated

Shipment of this product is not controlled by ICAO, USDOT, or Canadian TDG regulations.

IMDG

Not dangerous goods

IATA

Not dangerous goods

Marine Pollutant

No

SAFETY DATA SHEET

15. REGULATORY INFORMATION

OSHA Hazards

Not regulated.

Toxic Substances Control Act (TSCA)

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

CERCLA Hazardous Substance List (40 CFR 302)

Not listed.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 304

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

No hazards.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None.

State Right to Know Regulations

California – Proposition 65	Not Applicable
Massachusetts Right to Know	None
Minnesota Hazardous Substance List	None
New Jersey Right to Know	None
Pennsylvania Right to Know	None
Rhode Island Right to Know	None

16. ADDITIONAL INFORMATION

SDS REVISION STATUS: August 7, 2026 Replaces: January 15, 2021

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.