



MODERNWATER

Material Safety Data Sheet

Microcystins Plate Kit

MATERIAL IDENTIFICATION

Manufacturer/Distributor: Modern Water Inc.
15 Read's Way, Suite 100
New Castle, DE 19720

Phone Number: 1-(302)669-6900

Trade Names and Synonyms: Microcystins Plate Kit (7540000)

NFPA Ratings

Health:	4
Flammability:	0
Reactivity:	1

OSHA HAZARD DETERMINATION

Hazardous Ingredients	CAS Number	Weight Percent
Microcystins	101043-37-2	≤0.1%
Hydrochloric Acid	7647-01-0	≤4%
Dimethylformamide DMF	68-12-2	≤1%
1,2,6-Trihydroxyhexane Hexanetriol-1,2,6; Hexane-1,2,6-triol	106-69-4	≤5%

PHYSICAL DATA

Plastic kit containing small amounts of various liquids and powders.

HAZARDOUS REACTIVITY

Instability

Stable – Reactivity not expected with the product.

FIRE AND EXPLOSION DATA

Fire and Explosion Hazards

DMF has a flash point of 136°F (58°C).

Extinguishing Media

Use Carbon dioxide, dry chemical, or appropriate foam for surrounding media.

Special Fire Fighting Instructions

Firefighters must wear appropriate protective clothing and self-contained breathing apparatus.

HEALTH HAZARD INFORMATION

Primary Route(s) of Exposure/Entry: Skin, Eyes and Mouth. Wash thoroughly after handling, if ingested seek medical attention immediately.

Signs and Symptoms of Exposure/Medical Conditions Aggravated by Exposure:

Microcystin is highly toxic by ingestion, skin contact and if swallowed.

Inhalation of hydrochloric acid gas or fumes may cause irritation and burning of the throat, coughing and choking. Overexposure to the gas or fumes of hydrochloric acid may cause inflammation and occasionally ulceration of the nose, throat or larynx, bronchitis, pneumonia, palpitations and headache.

Hydrochloric acid is corrosive. Skin contact may cause severe irritation, inflammation, ulceration, necrosis, and chemical burns. Shock symptoms may develop including rapid pulse, sweating and collapse. Photosensitization reactions may occur in persons previously exposed. Contact with a compressed gas may cause frostbite. Eye exposure to hydrochloric acid may cause severe irritation, conjunctivitis, corneal necrosis and burns with impairment or permanent loss of vision.

Ingestion of hydrochloric acid may cause burns to the throat and mouth, esophagus and stomach with consequent pain, uneasiness, nausea, salivation, vomiting, diarrhea, shock, chills and intense thirst. Nephritis, fever and perforation of the intestinal tract, and circulatory collapse may occur. Death may be caused by necrosis of the esophageal or gastric necrosis.

Dimethylformamide (DMF) may cause abdominal pain, loss of appetite, nausea, vomiting, diarrhea, increased blood pressure, and liver injury, if inhaled. Contact with eyes or skin, may cause irritation. DMF may cause with prolonged or repeated skin contact, dermatitis with the systematic effects the same as if inhaled. If ingested, seek prompt medical attention.

Carcinogenicity: None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

Applicable Exposure Limits

MicrocystinLR

TXDS: ipr-rat LD₅₀ 50 µg/kg
unr-rat LD₅₀ 50 µg/kg
ihl-mus LD₅₀ 18 mg/m³/10m

Hydrochloric Acid

5 ppm OSHA (ceiling)
5 ppm ACGIH (ceiling)

Dimethylformamide

OSHA / PEL: 10 ppm
ACGIH /TLV: 10 ppm TWA 8 H, skin

1,2,6-Trihydroxyhexane

TXDS: orl-rat LD50 15500 mg/kg
ivn-rat LD50 5600 mg/kg
skn-rbt LD50 20 gm/kg

FIRST AID

- Inhalation** No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Remove victim to fresh air immediately. Keep affected person warm and at rest.
- Skin Contact** The compound is hazardous by skin contact. Remove contaminated clothing and shoes immediately. Wash affected area with mild soap or detergent for at least 15 minutes or until no evidence of chemical remains. In case of chemical burns, cover area with sterile, dry dressing. Bandage securely, but not too tightly. Get medical attention, immediately.
- Eye Contact** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids may be lifted occasionally, until no evidence of chemical remains. Call a physician.
- Ingestion** The compound is toxic by ingestion. Do not use gastric lavage or emesis. Affected person must drink 100 fold of water or milk to dilute acid. Call a physician immediately.

PROTECTION INFORMATION

General Control Measures and Precautions: Ventilation - Natural ventilation.

Personal Protective Equipment: Respiratory Protection: None required.

Protective Gloves: Are highly recommended.

Eye Protection: Safety glasses with side shields are required.

Other Protective Equipment: Lab coat or other long – sleeved garment is required. Access to a safety shower and eyewash station is required.

SPILL, LEAK AND DISPOSAL INFORMATION

Spill, Leak, or Release Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up.

Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

No special clean up practices are required.

Waste Disposal Dispose of as solid waste in accordance with any applicable federal, state, and local requirements.

SHIPPING INFORMATION

DOT Proper Shipping Name Not DOT regulated.

IATA/IMO Proper Shipping Name Not restricted.

TITLE III HAZARD CLASSIFICATION

Acute No

Chronic No

Fire No

Reactivity No

Pressure No

REGULATORY INFORMATION

OSHA HAZARD DETERMINATION: This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200

EPA DETERMINATIONS:

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, & LIABILITY ACT (CERCLA/SUPERFUND), 40 CFR 302 - This material is not known to contain hazardous substances in sufficient quantity to make it subject to CERCLA regulations.

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710

The material is a mixture as defined by TSCA. The chemical ingredients in this material are in the Section 8(b) Chemical Substance Inventory and/or are otherwise in compliance with TSCA. In the case of ingredients obtained from other manufacturers, Modern Water Inc relies on the assurance of responsible third parties in providing this statement.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPARTS C AND D

The material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable or reactive according to U.S. EPA definitions (40 CFR 261). This material could also become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste. If it is a hazardous waste, regulations 40 CFR 262-266 and 268 may apply.

HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS, 49 CFR 171-178 - This material is not known to contain hazardous substances in sufficient quantity to make it subject to the Regulations.

FOREIGN REGULATIONS: CANADIAN HAZARDOUS PRODUCTS ACT (WHMIS)

The material is not a WHMIS Controlled Product.

STATE REGULATIONS:**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986**

(“PROPOSITION 65”) The material is not known to contain any ingredients (s) subject to the Act.

PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT

This material is not known to contain any ingredient(s) subject to the Act. Non-hazardous ingredient(s) information is withheld as trade secret in accordance with Section 11 of the Pennsylvania Worker and Community Right to Know Act.

The above data are based on tests, experience, and other information which Modern Water Inc. believes reliable and are supplied for informational purposes only. However, some ingredients may have been purchased or obtained from third-party manufacturers. In these instances, Modern Water, Inc., in good faith, relies on information provided by those third parties. Since conditions of use are outside our control, MODERN WATER INC. DISCLAIMS ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM USE OF THE ABOVE DATA. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A

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Responsibility for MSDS: Modern Water Inc.
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