

SAFETY DATA SHEET

Prepared to U.S OSHA, CMA, ANSI and Canadian WHMIS Standards

COMPANY IDENTITY: Northstar Chemical Inc.

SDS REVISION DATE: 11/12/2015
PRODUCT IDENTITY: OxiMaze+

SAFETY DATA SHEET #W750499

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.

THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: SODIUM CHLORITE (TECHNICAL GRADE) 1-10

SYNONYMS: None

PRODUCT USES: Water treatment chemical, bleaching

COMPANY IDENTITY: Manufactured for Water Maze by Northstar Chemical Inc.

COMPANY ADDRESS: 14200 SW Tualatin Sherwood Rd.

COMPANY CITY: Sherwood, OR 97140 COMPANY PHONE: 503-625-3770

EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)

CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION



WARNING!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

(H300s) HEALTH: Skin Corrosion/Irritation(CAT:2)

H315 CAUSES SKIN IRRITATION.

(H300s) HEALTH: Serious Eye Damage/Eye Irritation(CAT:2B)

H320 CAUSES EYE IRRITATION.

(H300s) HEALTH: Acute Toxicity, Inhalation(CAT:4)

H332 HARMFUL IF INHALED.

2.2 PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P337+313 If eye irritation persists, get medical attention.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS MATERIAL CAS# EINECS# WT %

Water 7732-18-5 231-791-2 90-99 Sodium Chlorite 7758-19-2 - 1-10

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC: See Section 11 for Symptoms/Effects (acute & chronic).

4.2 EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

4.3 SKIN CONTACT:

In case of contact with skin immediately, remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

4.4 INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

4.5 SWALLOWING:

Rinse mouth. GET MEDICAL ATTENTION IMMEDIATELY. Do NOT give liquids to an unconscious or convulsing person.

SECTION 5. FIRE FIGHTING MEASURES

- 5.1 FIRE & EXPLOSION PREVENTIVE MEASURES: Non-combustible. NO open flames.
- 5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- 5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS: Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots).

5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:

Isolate from oxidizers, heat, & open flame.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES:

Keep unprotected personnel away.

Wear appropriate personal protective equipment given in Section 8.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep from entering storm sewers and ditches which lead to waterways.

6.3 METHODS & MATERIAL FOR CONTAINMENT & CLEAN-UP:

Stop spill at source. Dike and contain. Collect leaking & spilled liquid in sealable containers as far as possible.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Isolate from oxidizers, heat, & open flame. Use only with adequate ventilation. Avoid prolonged or repeated contact with skin. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, braze, or weld. Continue all label precautions!

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Keep from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS:

MATERIAL CAS# EINECS# TWA (OSHA) TLV (ACGIH)

Water 7732-18-5 231-791-2 None Known None Known

Sodium Chlorite 7758-19-2 - None Known None Known

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS

Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standard such as: NIOSH (US) or CEN (EU).

VENTILATION

LOCAL EXHAUST: As Needed MECHANICAL (GENERAL): As Needed

SPECIAL: None OTHER: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

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8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:
PERSONAL PROTECTIONS: Wear OSHA Standard goggles or face shield. Consult Safety
Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to
material. Wash clothing before reuse.
WORK & HYGIENIC PRACTICES: Provide readily accessible eyewash stations & safety
showers. Wash at end of each work shift & before eating, smoking or using the toilet.
Promptly remove clothing that becomes contaminated. Destroy contaminated leather
articles. Launder or discard contaminated clothing.
SECTION 9. PHYSICAL & CHEMICAL PROPERTIES
APPEARANCE: Liquid, Yellow
ODOR: None
ODOR THRESHOLD: Not Available
pH (Neutrality): 6.0 - 8.0
MELTING POINT/FREEZING POINT: Not Available
BOILING RANGE (IBP,50%, Dry Point): > 100 C / > 212 F
FLASH POINT (TEST METHOD): Not Applicable
EVAPORATION RATE (n-Butyl Acetate=1): Not Applicable
FLAMMABILITY CLASSIFICATION: Not Applicable
LOWER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable
VAPOR PRESSURE (mm of Hg)@20 C Not Available
VAPOR DENSITY (air=1): Not Available
GRAVITY @ 68/68 F / 20/20 C:
DENSITY: 1.009 (1%); 1.086 (10%)
SPECIFIC GRAVITY (Water=1): 1.009 (1%); 1.087 (10%)
POUNDS/GALLON: 8.405 (1%); 9.046 (10%)
WATER SOLUBILITY: Complete
PARTITION COEFFICIENT (n-Octane/Water): Not Available
AUTO IGNITION TEMPERATURE: Not Applicable
DECOMPOSITION TEMPERATURE: Not Available
TOTAL VOC'S (TVOC)*: 0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*: 0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS): 0.0 Wt% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) 0.0
VISCOSITY @ 20 C (ASTM D445): Not Available
* Using CARB (California Air Resources Board Rules).
SECTION 10. STABILITY & REACTIVITY
10.1 REACTIVITY & CHEMICAL STABILITY:
Stable under normal conditions, no hazardous reactions when kept from incompatibles.
10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:
Isolate from extreme heat, & open flame.
10.3 INCOMPATIBLE MATERIALS:
Isolate from strong oxidizers.
10.4 HAZARDOUS DECOMPOSITION PRODUCTS:
Hydrogen Chloride, Phosgene, Sodium Oxide & Hydroxide from burning.
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10.5 HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.1.1 SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.

11.1.2 EYE CONTACT:

Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation.

11.1.3 INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

11.1.4 SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

11.3.1 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH,

OSHA or ACGIH, as of this date, greater or equal to 0.1%.

- 11.3.2 TARGET ORGANS: May cause damage to target organs, based on animal data.
- 11.3.3 IRRITANCY: Irritating to contaminated tissue.
- 11.3.4 SENSITIZATION: No component is known as a sensitizer.
- 11.3.5 MUTAGENICITY: No known reports of mutagenic effects in humans.
- 11.3.6 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.
- 11.3.7 TERATOGENICITY: No known reports of teratogenic effects in humans.
- 11.3.8 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans. A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first
- 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

LD50 (Oral): 284 mg/kg (Rat)

LD50 (Skin): 134 mg/kg (Rabbit)

LC50 (4 hours): 0.23 mg/L (Rat) Skin irritation: Irritant

Eye irritation: Irritant

Repeated Dose Toxicity (Oral): Rat: Abnormal decrease in number of red blood cells.

Abnormal decrease in red-blood cell hemoglobin.

Organ weight changes (Liver)

Monkey: Thyroid effects.

SECTION 12. ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

LC50 (96 hours): 75 mg/L (Sheepshead minnow)

EC50 (96 hours): 1.32 mg/L (Green Algae)

EC50 (48 hours): 0.0146 mg/L (Water flea)

12.4 MOBILITY IN SOIL

This material is a mobile liquid.

12.5 DEGRADABILITY

This product is completely biodegradable.

12.6 ACCUMULATION

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH. Avoid

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.

ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D002 SECTION 14. TRANSPORT INFORMATION

MARINE POLLUTANT: No.

DOT/TDG SHIP NAME: UN1908, Chlorite solution, 8, PG-III

DRUM LABEL: Corrosive (8)

IATA / ICAO: UN1908, Chlorite solution, 8, PG-III IMO / IMDG: UN1908, Chlorite solution, 8, PG-III

EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154

SECTION 15. REGULATORY INFORMATION

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community

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Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

15.2 STATE REGULATIONS:

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN
CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS
CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):
This product contains no chemicals known to the State of California
to cause cancer or reproductive toxicity.

15.3 INTERNATIONAL REGULATIONS

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION

16.1 HAZARD RATINGS:

HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 0, PHYSICAL HAZARD: 0 (Personal Protection Rating to be supplied by user based on use conditions.) This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING

See Section 2 (Hazards Identification) Employees should be made aware of

See Section 2 (Hazards Identification). Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it. 16.3 SDS Revision DATE: 11/12/2015

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.