

MSDS Document

Product Metal Free

1. Chemical Product and Company Identification

Trade Name of this Product Metal Free

MSDS ID NC-MS028

Manufacturer

Natural Chemistry, Inc.

40 Richards Ave.

Norwalk, CT 06854

Contact Name

Tom Berry

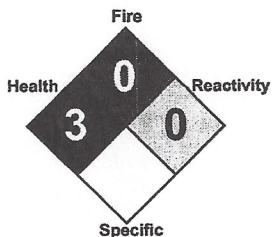
Phone Number

(800) 753-1233

Emergency Phone

CHEMTREC (800) 424-9300

Revision Date 7/20/2006



Health:	3
Fire:	0
Reactivity:	0
Specific	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Tetrasodium salt of ethylenediaminetetraacetic acid	000064-02-8	37 %			
Disodium ethylenediaminediacetate	038011-25-5	1 %			
Trisodium ethylenediaminetriacetate	019019-43-3	1 %			
Trisodium nitrilotriacetate	005064-31-3	1 %			
Sodium Hydroxide	001310-73-2	1 %	2 mg/m3	2 mg/m3	
Sodium glycolate	002836-32-0	3 %			

Water 7732-18-5 56 % 0

3. Hazard Identification

EMERGENCY OVERVIEW

Light yellow liquid. Amine odor. Causes severe eye burns. Causes burns to the mouth and throat. May cause skin irritation. Aspiration hazard. Can enter lungs and cause damage. Evacuate area. Keep upwind of spill.

POTENTIAL HEALTH EFFECTS:

EYE:

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Mist may cause eye irritation.

SKIN:

Prolonged contact may cause slight skin irritation with local redness. May cause more severe response if confined to skin or skin is abraded (scratched or cut). Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling and tissue damage. Mist may cause skin irritation. Not classified as corrosive to the skin according to DOT guidelines. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

INGESTION:

Low toxicity if swallowed. Swallowing may result in gastrointestinal irritation or ulceration. Swallowing may result in burns of the mouth and throat. Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

INHALATION

Vapors are primarily water; single exposure is not likely to be hazardous. Mist may cause irritation of upper respiratory tract (nose and throat).

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

CANCER INFORMATION:

This mixture contains a very small amount of the trisodium salt of nitrilotriacetic acid (trisodium NTA, CAS=005064-31-3) which is listed as a potential carcinogen for hazard communication purposes under OSHA Standard 20 CFR 1910.1200. Components listed by IARC and NTP: trisodium nitrilotriacetate. Although large dietary doses of NTA have caused urinary tumors in laboratory animals, there is little likelihood that NTA could cause cancer in humans, especially at subtoxic doses. The trisodium salt of EDTA did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS):

EDTA and its sodium salts have been reported to cause birth defects in laboratory animals only at exaggerated doses that were toxic to the mother. These effects are likely associated with zinc deficiency due to chelation. Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus.

REPRODUCTIVE EFFECTS:

Limited data in laboratory animals suggests that the material does not affect reproduction.

4. First Aid Information

EYE:

Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

SKIN:

Wash skin with plenty of water.

INGESTION:

Do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Do not give anything by mouth to an unconscious person.

INHALATION:

Move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN:

Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower GI tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Flash Point	Not measurable
FP Method	PMCC

HAZARDOUS COMBUSTION PRODUCTS:

Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are limited to: nitrogen oxides, carbon monoxide, carbon dioxide, ammonia.

OTHER FLAMMABILITY INFORMATION:

This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA:

To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS:

Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:

Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire

fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with SCBA. If this is not available, wear full chemical resistant clothing with SCBA and fight fire from a remote location. For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections.

6. Accidental Release Measures

PROTECT PEOPLE:

Evacuate area. Keep upwind of spill. Ventilate area of leak or spill. Only trained and properly protected personnel must be involved in clean-up operations. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

PROTECT THE ENVIRONMENT:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

CLEANUP:

Contain spilled material if possible. Absorb with material such as non-combustible material. Collect in suitable and properly labeled open containers. Wash the spill site with water. See Section 13, Disposal Considerations for additional information.

7. Handling and Storage

HANDLING:

Do not get in eyes. Avoid breathing mist. Avoid contact with skin or clothing. Use only with adequate ventilation. Wash thoroughly after handling. Keep container closed. See Section 8, Exposure Controls/Personal Protection.

STORAGE:

Do not store in: zinc, aluminum, carbon steel, copper, copper alloys, galvanized containers, nickel. Storage temperature: 0 to 120F (-17.8 to 48.9C). See Section 10 for more specific information.

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS:

Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:

Use chemical goggles. Eye wash fountain should be located in immediate work area.

SKIN PROTECTION:

Wear clean, long-sleeved, body-covering clothing. Use gloves chemically resistant to this material. When prolonged or frequently repeated contact could occur, use chemically protective clothing resistant to this material. Selection of specific items such as faceshield,

gloves, boots, apron or full-body suit will depend on operation. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures.

RESPIRATORY PROTECTION:

In misty atmospheres, use an approved particulate respirator.

Major components of this material do not have exposure guidelines.

9. Physical and Chemical Properties

Physical State	Liquid
Specific Gravity	1.31
Density lbs/Gal.	10.9123
Color/Appearance	Light yellow
Odor	Amine
Boiling/Cond. Point	223° F, 106° C
Melting/Freezing Point	-13° F, -25° C
Solubility	Completely miscible
Evaporation Rate	Not available
Percent Volatile	Not available
Viscosity	Not available
Vapor Density	Same as water
Vapor Pressure	Same as water

Physical and chemical properties listed above are general and approximate and are not intended as product specifications.

10. Stability and Reactivity

CHEMICAL STABILITY:

Stable under recommended storage conditions. See Storage, Section 7.

CONDITIONS TO AVOID:

Some components of this product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER CHEMICALS:

Avoid contact with strong oxidizers. Avoid contact with metals, such as: zinc, aluminum, carbon steel, copper, copper alloys, galvanized metals, nickel. Flammable hydrogen may be generated from contact with metals such as aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION:

Will not occur.

11. Toxicological Information

TOXICOLOGICAL INFORMATION:

(See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN:

The LD50 for skin absorption in rabbits is >5000 mg/kg.

INGESTION:

The LD50 for skin absorption in rabbits is >5000 mg/kg.

MUTAGENICITY:

Most data indicate that EDTA and its salts are not mutagenic. Minimal effects reported are likely due to trace metal deficiencies resulting from chelation by EDTA.

12. Ecological Information

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING:

Based largely or completely on information for similar materials (EDTA): bioconcentration potential is low (BCF less than 100 or Log Pow less than 3).

DEGRADATION & PERSISTENCE:

Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or ThOD <2.5%). Theoretical Oxygen Demand (ThOD) is calculated to be 1.31 p/p.

ECOTOXICITY:

Material is practically non-toxic to fish on an acute basis (LC50 >100 mg/L). Acute LC50 in fathead minnow (*Pimephales promelas*) is >100 mg/L. Acute LC50 in bluegill (*Lepomis macrochirus*) is 1030 mg/L.

13. Disposal Considerations

(See Section 15 for Regulatory Information.)

DISPOSAL:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

NATURAL CHEMISTRY, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT:

The preferred options include sending to a licensed, permitted: recycler, reclaimer. For additional information refer to: Regulation Information, MSDS Section 15 and Stability & Reactivity Information, MSDS Section 10.

14. Transportation Information

DEPARTMENT OF TRANSPORTATION (D.O.T.):

For DOT regulatory information, if required, consult transportation regulations or product

shipping papers

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations or product shipping papers

15. Regulatory Information

NOTICE:

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS:

SARA 313 INFORMATION:

To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard
A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW:

The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
FORMALDEHYDE	000050-00-0	PA2
SODIUM HYDROXIDE (SOLUTION)	001310-73-2	PA1 PA3

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).
PA2=Pennsylvania Special Hazardous Substance (present at greater than or equal to 0.01%).
PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

(Not meant to be all-inclusive - selected regulations represented.)

CANADIAN REGULATIONS

WHMIS INFORMATION:

The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D2A - possible, probable or known human carcinogen according to classifications by IARC or ACGIH

D2B - eye or skin irritant

E - corrosive to metal or skin

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

CPR STATEMENT:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

HAZARDOUS PRODUCTS ACT INFORMATION:

This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:	CAS #	AMOUNT(%w/w)
Tetrasodium salt of ethylenediaminetetraacetic acid	CAS# 000064-02-8	37%
Disodium ethylenediaminediacetate	CAS# 038011-25-5	1%
Trisodium ethylenediaminetriacetate	CAS# 019019-43-3	1%
Trisodium nitrilotriacetate	CAS# 005064-31-3	1%
Sodium hydroxide	CAS# 001310-73-2	1%

16. Other Information

PREPARATION INFORMATION:

This Material Safety Data Sheet (MSDS) was retyped, copied or reproduced onto this form and in this format from the original MSDS supplied to Natural Chemistry, Inc. by the manufacturer or distributor of the product named herein. Natural Chemistry, Inc. disclaims all liability for the content. Natural Chemistry, Inc. has included all information contained on the original MSDS supplied to us. No information contained on the original supplied to us has been changed or omitted.