

SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

SECTION 1: Identification

Product identifier

Product name Hardness, Total 500 – Reagent C

Product number R-80290

Recommended use and

restrictions

To be used in accordance with manufacturer instructions or under the direct guidance of the

manufacturer.

Manufacturer Taylor Technologies, Inc.

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SECTION 2: Hazard(s) identification

Physical hazards Not applicable

Health hazards Carcinogenicity Category 2

Environmental hazards Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.

Label elements

Hazard pictograms



Signal word Warning

Hazard statements Suspected of causing cancer.

Precautionary statements

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Wear protective gloves/protective clothing/eye protection/face protection

if contact is likely to occur.

Response IF EXPOSED OR CONCERNED: Get medical advice/attention.

Storage Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international

regulations.

Hazards not otherwise classified Not applicable

SECTION 3: Composition/information on ingredients

Mixture				
Chemical name	Common name and synonyms	CAS number	% w/w	
Water	Dihydrogen oxide	7732-18-5	60-80	
Nitrilotriacetic acid trisodium salt monohydrate	NTA sodium hydrate	18662-53-8	1-5	
Nonhazardous and other components below reportable levels	Not applicable	Not applicable	15-40	

SECTION 4: First-aid measures

If inhaled

Remove individual to fresh air. Immediately call a physician or poison control center. Give oxygen or artificial respiration if needed.

In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical advice/attention if irritation develops. Chemical burns must be treated by a physician.

In case of eye contact

SDS US

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed

Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

Most important symptoms and effects, both acute and delayed

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media
Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific hazards arising from the substance or mixture

Fire hazard Not flammable Explosion hazard Not explosive

Reactivity Hazardous reactions will not occur under normal conditions.

Hazardous combustion products Carbon oxides, chlorine, nitrogen oxides, sodium oxides. Other irritating fumes and smoke.

Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting equipment/instructions Use water spray or fog for cooling exposed containers.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

SECTION 6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, watercourses, or onto the ground.

Methods and material for containment and cleaning up

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

SECTION 7: Handling and storage

Personal precautions, protective equipment, and emergency procedures

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately

Conditions for safe storage, including any incompatibilities

Keep tightly capped. Store out of direct sunlight between 36°F–85°F. Store locked up. Store away from incompatible materials (refer to section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

US ACGIH Threshold Limit Values

Not regulated

US NIOSH: Pocket Guide to Chemical Hazards

Not regulated

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Not regulated

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates

should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eyewash facilities and emergency shower must be available when handling

this product.

Personal protective equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA

approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the

exposure limits. Advice should be sought from respiratory protection suppliers.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Form Liquid
Color Clear, red
Odor Odorless

Odor threshold No data available

pH 5.25

No data available Evaporation rate Melting point Not applicable Freezing point No data available Initial boiling point (boiling range) No data available Flash point No data available Specific gravity No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available Upper Flammability Limit No data available Lower Flammability Limit No data available Vapor pressure No data available Vapor density No data available

Solubility Soluble in all proportions

Partition coefficient

(n-octanol/water)

No data available

Viscosity

No data available
Explosive properties

Not applicable
Oxidizing properties

Not applicable

SECTION 10: Stability and reactivity

Reactivity Hazardous reactions will not occur under normal conditions.

Chemical stability Stable under recommended handling and storage conditions (refer to section 7 of the SDS).

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoidContact with incompatible materials. Do not use in areas without adequate ventilation.

Incompatible materials

Hazardous decomposition products

Acid anhydrides, metals, strong oxidizing materials, strong bases. No hazardous decomposition products under conditions of normal use.

SECTION 11: Toxicological information

Information on toxicological effects

Likely routes of exposure are skin/eye contact and ingestion.

Most important symptoms/effects,

acute and delayed

Direct skin contact may cause irritation. Symptoms may include redness and itching.

Direct eye contact may cause serious irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision.

Inhalation of mists can cause respiratory irritation, drowsiness, dizziness. Symptoms may

include coughing and breathing difficulties.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Suspected of causing cancer.

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for product and individual

ingredient acute toxicity data.

Hardness, Total 500 - Reagent C (CAS Mixture)

Acute

Dermal

LD50

Rat

No data available

Inhalation

 LC_{50}

Rat

Species

No data available

Oral

LD₅₀ Rat

Acute Toxicity Data

>2000 mg/kg

Nitrilotriacetic acid trisodium salt monohydrate (CAS 18662-53-8)

Acute

Components

Dermal

LD₅₀

Rat

No data available

Inhalation

LC₅₀

Rat

No data available

Oral

LD50

Rat

1100 mg/kg

Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory sensitization No data available Skin sensitization No data available Germ cell mutagenicity No data available

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Nitrilotriacetic acid trisodium salt monohydrate; Group 2B-Possibly carcinogenic to humans.

OSHA 13 Carcinogens

Not regulated

US National Toxicology Program (NTP) Report on Carcinogens

Nitrilotriacetic acid trisodium salt monohydrate; Reasonably anticipated to be a human carcinogen.

Reproductive toxicity Specific target organ toxicity

(single exposure)

No data available No data available

Specific target organ toxicity

(repeated exposure)

No data available

SDS US

Aspiration hazard No data available

SECTION 12: Ecological information

Ecotoxicity This product is not classified as environmentally hazardous.

Persistence and degradabilityNo data availableBioaccumulative potentialNo data availableMobility in soilNo data available

Other adverse effects

Large or frequent spills can have a harmful or damaging effect on the environment.

SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Not regulated as dangerous goods.IATANot regulated as dangerous goods.IMDGNot regulated as dangerous goods.

SECTION 15: Regulatory information

US federal regulations

CERCLA Hazardous Substance (40 CFR 302.4)

Not regulated

SARA 302 Extremely Hazardous Substance (40 CFR 355 Appendices A / B)

Not regulated

SARA 304 Emergency Release Notification

Not regulated

SARA 311/312 Hazardous Chemical

Chemical name	CAS number	
Nitrilotriacetic acid trisodium salt monohydrate	18662-53-8	

SARA 313 (TRI reporting)

Not regulated

TSCA Section 8(b) Chemical Inventory

All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Clean Water Act, Toxic and Priority Pollutants (40 CFR 401.15 and CFR 423, Appendix A)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65)

Chemical name	CAS number	
Nitrilotriacetic acid trisodium salt	18662-53-8	
monohydrate		

WARNING: This product can expose you to nitrilotriacetic acid trisodium salt monohydrate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

New Jersey Worker and Community Right-to-Know Act

Not regulated

Massachusetts Right-to-Know Act

Not regulated

Pennsylvania Worker and Community Right-to-Know Act

Not regulated

Rhode Island Right-to-Know Act

Not regulated

SECTION 16: Other information

NFPA Rating

Health hazard 2
Fire hazard 0
Reactivity 0
Specific N/A

Disclaimer

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