

# SAFETY DATA SHEET

## Bio+ Dishwasher Liquid Delimer/Descaler

### SECTION 1: PRODUCT & COMPANY IDENTIFICATION

DATE: 06/13/2014 / Supersedes Revision: n/a

**Company:**

.Native Green  
2110 East Walton Blvd., Suite 200  
Auburn Hills, MI 48326  
Phone: (888) 456-6444

**EMERGENCY CONTACT:** Chemtrec, Reference CCN203605  
Phone: (800) 424-9300 (collect calls accepted) / International: (703) 527-3887

**Product Name:** Bio+ Dishwasher Liquid Delimer/Descaler

**Part No.:** 544-XXX

**ID Code:** 4658

**Product Category:** Delimer/Descaler

### SECTION 2: HAZARD(S) IDENTIFICATION

**Acute Toxicity:** Oral, Category 5

**Skin Corrosion/Irritation,** Category 2

**Serious Eye Damage/Eye Irritation,** Category 2



**GHS Signal Word:** WARNING

**GHS Hazard Phrases:**

H303 - May be harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

**GHS Precaution Phrases:**

P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:**

P312 - Call a Poison Control Center or doctor if you feel unwell.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P332+313 - If skin irritation occurs, get medical advice/attention.

P362 - Take off contaminated clothing.

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

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

**GHS Storage and Disposal Phrases:**

P501 - Dispose of contents/container to waste after rinsing.

**Hazard Rating System:**

**HMS**

Health: 1

Flammability: 0

Physical: 0

PPE: B

**NFPA**

Health: 1

Flammability: 0

Instability: 0

Special Hazard: None

**Potential Health Effects (Acute and Chronic):**

**Inhalation:** Causes respiratory tract irritation.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
77-92-9	Citric acid	<15.0 %

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### SECTION 4: FIRST-AID MEASURES

#### Emergency and First Aid Procedures:

**In Case of Inhalation:** If breathed in, move person into fresh air.

**In Case of Skin Contact:** If irritation develops, get medical aid. Wash off with soap and plenty of water.

**In Case of Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**In Case of Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

**Signs and Symptoms of Exposure:** None known.

### SECTION 5: FIRE-FIGHTING MEASURES

**Flash Point:**

**Explosive Limits:** LEL: UEL:

**Autoignition Pt:**

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

**Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn. Wear self contained breathing apparatus for fire fighting if necessary.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Personal precautions. Use personal protective equipment. Ensure adequate ventilation. Environmental precautions. Do not let product enter drains. Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal..

### SECTION 7: HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** No special handling procedures are required. Avoid contact with skin and eyes. Normal measures for preventive fire protection.

**Precautions To Be Taken in Storing:** No special storage requirements. Keep container tightly closed in a dry and well-ventilated place.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
77-92-9	Citric acid			

**Respiratory Equipment (Specify Type):** Respirator protection is not normally required. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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 standards such as NIOSH (US) or CEN (EU).

**Eye Protection:** Safety glasses

**Protective Gloves:** Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Other Protective Clothing:** Protective garments not normally required.

**Engineering Controls (Ventilation etc.):** There are no special ventilation requirements.

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Appearance and Odor:** Clear, tan liquid

Mild odor.

**Melting Point:**

**Boiling Point:**

**Autoignition Pt:**

**Flash Pt:**

**Explosive Limits:** LEL: UEL:

**Specific Gravity (Water = 1):** ~ 1.05

**Vapor Pressure (vs. Air or mm Hg):**

**Vapor Density (vs. Air=1):**

**Evaporation Rate:**

**Solubility in Water:** Complete

**Viscosity:** Thin

**pH:** ~ 2.8 @ 1%

**Percent Volatile:**

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### SECTION 10: STABILITY AND REACTIVITY

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** Incompatible materials.  
**Incompatibility – Materials To Avoid:** Chlorine, Oxidizing agents, Bases.  
**Hazardous Decomposition Or Byproducts:** Carbon oxides.  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid -Hazardous Reactions:**

### SECTION 11: TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No data available. Teratogenicity: No data available.  
**Irritation or Corrosion:** Skin - rabbit - Mild skin irritation - -24 h. Serious eye damage/eye irritation: Eyes - rabbit - Severe eye irritation.  
**Carcinogenicity/Other Information:** CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Carcinogenicity. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
77-92-9	Citric acid	n.a.	n.a.	n.a.	n.a.

### SECTION 12: ECOLOGICAL INFORMATION

**General Ecological Information:** No information available.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging. Dispose of as unused product..

### SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

**LAND TRANSPORT (US DOT):**  
**DOT Proper Shipping Name:** Not regulated as a hazardous material.  
**DOT Hazard Class:**  
**UN/NA Number:**  
**Packing Group:**  
**LAND TRANSPORT (Canadian TDG):**  
**TDG Shipping Name:**

### SECTION 15: REGULATORY INFORMATION

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
77-92-9	Citric acid	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
77-92-9	Citric acid	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

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**SECTION 16: OTHER INFORMATION**

**Revision Date:** 06/13/2014

**Preparer Name:** Regulatory Affairs

**Additional Information About This Product:**

**Company Policy or Disclaimer:** The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.