



Material Safety Data Sheet

<p>NFPA</p> 	<p>HMIS</p> <table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0	<p>Personal Protective Equipment</p>  <p style="text-align: center;">See Section 15.</p>
Health Hazard	1							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		<i>Page Number: 1</i>
Common Name/ Trade Name	Ethylenediaminetetraacetic acid tetrasodium salt, dihydrate	<p>Catalog Number(s). E1047</p> <p>CAS# 10378-23-1; 64-02-8 (anhydrous)</p>
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<p>RTECS AH5075000 (For CAS no. 64-02-8 known as EDTA Tetrasodium salt, anhydrous)</p> <p>TSCA TSCA 8(b) inventory: No products were found. Exempt from TSCA 8(b) Inventory Listing since it is a hydrate. However, the anhydrous form (CAS no. 64-02-8) is listed on the TSCA 8(b) Inventory.</p>
Commercial Name(s)	Versene, Kalex, Hampene, Dissolvine	CI# Not available.
Synonym	EDTA tetrasodium salt dihydrate; Tetrasodium EDTA dihydrate; Tetrasodium salt EDTA dihydrate; Tetrasodium salt of EDTA, dihydrate; Tetrasodium salt of ethylenediaminetetraacetic acid, dihydrate; Sodium salt of ethylenediaminetetraacetic acid, dihydrate; Sodium ethylenediaminetetraacetate, dihydrate; Sodium ethylenediaminetetraacetic acid, dihydrate; Sodium EDTA, dihydrate; Edetate sodium dihydrate; Edetic acid tetrasodium salt, dihydrate; Endrate tetrasodium; Ethylenebis(iminodiacetic acid) tetrasodium salt, dihydrate; Ethylenediaminetetraacetic acid, tetrasodium salt, dihydrate; Edathanil tetrasodium, dihydrate; N, N'-Ethylenediaminediacetic acid tetrasodium salt.	<p style="text-align: center;"><u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u></p> <p style="text-align: center;">CALL (310) 516-8000</p>
Chemical Name	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt, dihydrate	
Chemical Family	Not available.	
Chemical Formula	C10H12N2Na4O8.2H2O	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients

Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Ethylenediaminetetraacetic acid tetrasodium salt	10378-23-1				100

Toxicological Data on Ingredients **Ethylenediaminetetraacetic acid tetrasodium salt:**
 ORAL (LD50): Acute: >2000 mg/kg [Rat].

Section 3. Hazards Identification

Potential Acute Health Effects Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects **CARCINOGENIC EFFECTS:** Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
 The substance may be toxic to upper respiratory tract, skin, eyes.
 Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact Not available.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation Not available.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion Not available.

Section 5. Fire and Explosion Data

Flammability of the Product May be combustible at high temperature.

Auto-Ignition Temperature Not available.

Flash Points CLOSED CUP: Higher than 93.3°C (200°F).

Flammable Limits Not available.

Products of Combustion These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.

Fire Hazards in Presence of Various Substances Slightly flammable to flammable in presence of heat.
 Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances Slightly explosive in presence of open flames and sparks.
 Non-explosive in presence of shocks.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemical powder.
 LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Section 6. Accidental Release Measures

Small Spill Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: **Neutralize the residue with a dilute solution of acetic acid.** Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill Use a shovel to put the material into a convenient waste disposal container. **Neutralize the residue with a dilute solution of acetic acid.** Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystalline solid.)	Odor	Not available.
Molecular Weight	416.23 g/mole	Taste	Not available.
pH (1% soln/water)	11.3 [Basic.]	Color	White.
Boiling Point	Not available.		
Melting Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	Bulk Density: 0.77 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Soluble in cold water.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, metals.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Avoid contact with aluminum, copper, copper alloys, zinc, and nickel, and strong oxidizers.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): >2000 mg/kg [Rat].
Chronic Effects on Humans	May cause damage to the following organs: upper respiratory tract, skin, eyes.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause irritation of the respiratory tract. Ingestion: May cause gastrointestinal tract irritation. The toxicological properties of this substance have not been fully investigated.

Section 12. Ecological Information

Ecotoxicity	Ecotoxicity in water (LC50): 760 mg/l 96 hours [Bull gill sunfish]. 59.8 mg/l 96 hours [Fathead Minnow].
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

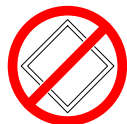
Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations No products were found.

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).
China: Listed on National Inventory.
Japan: Not listed on National Inventory (ENCS).
Korea: Not listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

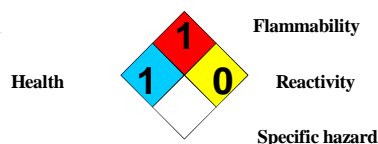
Other Classifications **WHMIS (Canada)** Not controlled under WHMIS (Canada).

DSCL (EEC) This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)



WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada)
(Pictograms)



ADR (Europe)
(Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

Section 16. Other Information

MSDS Code E3360

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 1/28/2013.

Verified by Sonia Owen.

Printed 1/30/2013.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.