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Version 2

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product Name** MICRO-SEQ 100**Other means of identification****Product Code** 158  
**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended Use** Chelate Additive For Membrane Cleaning.  
**Uses advised against** No information available**Manufacturer Address**

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

**Emergency telephone number**

Chemtrec 1-800-424-9300

**2. HAZARDS IDENTIFICATION****Classification**

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

**Label elements****Emergency Overview****Danger****Hazard statements**Harmful if swallowed  
Causes severe skin burns and eye damage  
May be corrosive to metals**Appearance** aqueous solution**Physical state** liquid**Odor** Slight Ammonia**Precautionary Statements - Prevention**Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep only in original container

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see Section 4 on this label)

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

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

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

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store locked up

Store in a corrosive resistant container.\*\*\*

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

- Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Tetrasodium EDTA	64-02-8	39	
Trisodium NTA	5064-31-3	2	
Sodium hydroxide	1310-73-2	1.9	

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First aid measures****Eye contact**

Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

**Skin Contact**

Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

**Inhalation**

Remove victim to fresh air. If breathing difficulty occurs or persists, get medical attention.

**Ingestion**

Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Eye contact causes irritation. May cause skin irritation. This product may be harmful if swallowed. Exposure to excessive concentration of vapors, mists, fumes or aerosols may cause respiratory tract discomfort and/or mild irritation.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### **Suitable extinguishing media**

Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** None known.

### **Specific hazards arising from the chemical**

No information available.

**Hazardous combustion products** Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NO<sub>x</sub>). Carbon oxides. Hazardous metal fumes and oxides.

### **Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### **Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.
<b>Environmental precautions</b>	See Section 12 for additional ecological information.
<b>Methods for containment</b>	Completely contain spilled material with dikes or sand bags, etc. Stop leak if you can do it without risk.
<b>Methods for cleaning up</b>	Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

**Advice on safe handling** Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation.

### **Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.
<b>Incompatible materials</b>	Strong oxidizing agents. Aluminum. Copper. Copper alloys. Zinc. Nickel compounds.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

**Appropriate engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Wear protective splash proof safety goggles. Additional full face protection is recommended if splashing is a possibility.
<b>Skin and body protection</b>	If contact is anticipated, wear protective clothing appropriate to use conditions.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Slight Ammonia
<b>Appearance</b>	aqueous solution	<b>Odor threshold</b>	No information available
<b>Color</b>	clear yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11.5	1% Solution
Melting point/freezing point	-18 °C / 0 °F	
Boiling point / boiling range	107 °C / 224.6 °F	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	same as water	
Vapor density	same as water	
Specific Gravity	1.25-1.33	
Water solubility	Miscible in water	
Solubility in other solvents	No information available	
Partition coefficient	<0	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Avoid extreme heat. Incompatible materials.

**Incompatible materials**

Strong oxidizing agents. Aluminum. Copper. Copper alloys. Zinc. Nickel compounds.

**Hazardous Decomposition Products**

Carbon oxides. Nitrogen oxides (NOx).

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
<b>Inhalation</b>	No data available.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin Contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrasodium EDTA 64-02-8	= 10 g/kg ( Rat )	-	-
Trisodium NTA 5064-31-3	= 920 mg/kg ( Rat )	-	> 5 mg/L ( Rat ) 4 h
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg ( Rabbit )	-

**Information on toxicological effects****Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available.**Germ cell mutagenicity** No information available.**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Trisodium NTA 5064-31-3	-	Group 2B	-	X

**Reproductive toxicity** No information available.**STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Aspiration hazard** No information available.**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1247 mg/kg  
 ATEmix (dermal) 71053 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodosmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static	-
Trisodium NTA 5064-31-3	-	93 - 170: 96 h Pimephales promelas mg/L LC50 flow-through 175 - 225: 96 h Lepomis macrochirus mg/L LC50 static 252: 96 h Lepomis macrochirus mg/L LC50 470: 96 h Pimephales promelas mg/L LC50 static 560 - 1000: 96 h Oryzias latipes mg/L LC50 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static 72 - 133: 96 h Oncorhynchus mykiss mg/L LC50 static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 114: 96 h Pimephales promelas mg/L LC50	560 - 1000: 48 h Daphnia magna mg/L LC50
Sodium hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

Chemical Name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic Corrosive

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated by land

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb	-	-	X

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trisodium NTA 5064-31-3	-	X	-
Sodium hydroxide 1310-73-2	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection X

Prepared By lmt  
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**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**