

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 05.24.2023

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Chem-Genie® 230

SECTION 1: Identification

Product Identifier

Product Name: Chem-Genie® 230

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Vehicle Pre-Soak, Bug Remover, Tire-Wheel Cleaner

Uses Advised Against: Not determined or not applicable.

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:

United States

Quest Car Care Products

3333 Production Ct.

Zeeland, Michigan 49464

616-772-5100

www.questcarcare.com

Emergency Telephone Number:

United States

CHEMTREC

1-800-424-9300 (24 hrs)

1-800-262-8200 (24 hrs)

1-703-527-3887 (24 hrs (international))

SECTION 2: Hazard(s) Identification

GHS Classification:

Corrosive to metals, category 1

Skin corrosion, category 1A

Serious eye damage, category 1

Respiratory sensitization, category 1

Skin sensitization, category 1

Specific target organ toxicity - single exposure, category 2

Specific target organ toxicity - single exposure, category 3, narcotic effects

Label elements

Hazard Pictograms:



Signal Word: Danger

Hazard statements:

H290 May be corrosive to metals

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- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H317 May cause an allergic skin reaction
- H371 May cause damage to organs if swallowed.
- H336 May cause drowsiness or dizziness

Precautionary Statements:

- P234 Keep only in original container
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P264 Wash hands/skin thoroughly after contact with or handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P284 [In case of inadequate ventilation] Wear appropriate respiratory protection
- P272 Contaminated work clothing must not be allowed out of the workplace
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P390 Absorb spillage to prevent material-damage
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P363 Wash contaminated clothing before reuse
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P310 Immediately call a POISON CENTER/911/PHYSICIAN IF: swallowed, eye contact, skin burns/rash or breathing difficulties.
- P321 Specific treatment (see first aid procedures on the product label in section 4 of this SDS)
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/911 immediately.
- P302+P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention
- P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/911.
- P312 Call a POISON CENTER/911/PHYSICIAN if you feel unwell.
- P406 Store in corrosive resistant/or heavy duty plastic container using a chemical resistant inner liner.
- P405 Store locked up
- P403+P233 Store in a well-ventilated place. Keep container tightly closed
- P501 Dispose of contents/container in accordance with local, state and federal regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 141-43-5	2-aminoethanol	20-40
CAS Number: 7732-18-5	Water	20-40
CAS Number: 112-34-5	2-(2-butoxyethoxy)ethanol	5-15

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CAS Number: Proprietary	Alcohols, branched and linear, ethoxylated	5-15
CAS Number: 64-02-8	Tetrasodium ethylenediamine tetraacetate	5-15

Additional Information:

Ingredients not listed above are being withheld as trade secret.

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If exposed, seek medical advice/attention.

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Products that are corrosive to metals are often corrosive to the skin, eyes and the respiratory tract.

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to

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eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.

Inhalation exposure may cause allergy, asthma symptoms or breathing difficulties. Symptoms may include cough, chronic phlegm, shortness of breath, wheezing and chest tightness. Symptoms may be delayed.

Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.

May cause damage to organs. Effects are dependent on exposure (dose, concentration, contact time).

Inhalation may have adverse effects on the central nervous system. Symptoms may include drowsiness, dizziness, headache, nausea and lowering of consciousness. Acute overexposure via inhalation may result in respiratory distress, confusion and unconsciousness.

Delayed Symptoms and Effects:

Effects are dependent on exposure (dose, concentration, contact time).

Immediate Medical Attention and Special Treatment

Specific Treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

In case of skin contact, seek prompt medical attention while rinsing is continued.

In case of ingestion, seek prompt medical attention.

If exhibiting symptoms of exposure, seek prompt medical attention.

Overexposure via inhalation requires urgent medical treatment.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Contact with metals may evolve flammable hydrogen gas. Thermal decomposition may produce irritating/toxic fumes/gases.

Thermal decomposition may produce irritating/toxic fumes/gases.

Special Protective Equipment for Firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

DO NOT GET WATER INSIDE CONTAINERS. Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers.

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Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable corrosive resistant containers for future disposal. Do not get water in containers as reaction with water or moist air may release toxic, corrosive or flammable gases. Dispose of in accordance with all applicable regulations (see Section 13).

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Do not get in eyes. Avoid contact with skin and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

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Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	2-(2-butoxyethoxy)ethanol	112-34-5	8-Hour TWA: 10 ppm
	2-aminoethanol	141-43-5	8-Hour TWA: 3 ppm
	2-aminoethanol	141-43-5	15-Minute STEL: 6 ppm
NIOSH	2-aminoethanol	141-43-5	REL-TWA: 8 mg/m ³ (3 ppm [up to 10 hr])
	2-aminoethanol	141-43-5	15-Minute STEL: 15 mg/m ³ (6 ppm)
	2-aminoethanol	141-43-5	IDLH: 30 ppm
OSHA	2-aminoethanol	141-43-5	8-Hour TWA-PEL: 6 mg/m ³ (3 ppm)
United States(California)	2-aminoethanol	141-43-5	8-Hour TWA-PEL: 8 mg/m ³ (3 ppm)
	2-aminoethanol	141-43-5	15-Minute STEL: 15 mg/m ³ (6 ppm)

Biological Limit Values:

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

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection.

Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by

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recognized national standards (or equivalent).

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Yellow-Green Liquid
Odor	Amine, Slight Citrus
Odor threshold	Not determined or not available.
pH	13.0
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	>93 c
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	1.02-1.05
Solubilities	Water
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and Reactivity

Reactivity:

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Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
Tetrasodium ethylenediamine tetraacetate	oral	LD50 Rat: 1780 mg/kg
2-(2-butoxyethoxy)ethanol	dermal	LD50 Rabbit: 2764 mg/kg
	oral	LD50 Mouse: 2410 mg/kg
2-aminoethanol	oral	LD50 Rat: 1089 mg/kg
	Inhalation ATE	LC50 Rat: 11 mg/L
	dermal	LD50 Rabbit: 1010 mg/kg
Alcohols, branched and linear, ethoxylated	Oral ATE	LD50 Rat: 500 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
	inhalation	LC50 Rat: >1.6 mg/m ³ (4 hr [Aerosol])

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
2-aminoethanol	Causes severe skin burns.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

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Name	Result
Tetrasodium ethylenediamine tetraacetate	Causes serious eye damage.
2-(2-butoxyethoxy)ethanol	Causes serious eye irritation.
2-aminoethanol	Causes serious eye damage.
Alcohols, branched and linear, ethoxylated	Causes serious eye damage.

Respiratory or Skin Sensitization

Assessment:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Tetrasodium ethylenediamine tetraacetate	Not Applicable
2-(2-butoxyethoxy)ethanol	Not Applicable
Water	Not Applicable
2-aminoethanol	Not Applicable
Alcohols, branched and linear, ethoxylated	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Tetrasodium ethylenediamine tetraacetate	Not Applicable
2-(2-butoxyethoxy)ethanol	Not Applicable
Water	Not Applicable
2-aminoethanol	Not Applicable
Alcohols, branched and linear, ethoxylated	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

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No data available.

Substance Data: No data available.

Specific Target Organ Toxicity (Single Exposure)

Assessment:

May cause damage to organs.

May cause drowsiness or dizziness.

Product Data:

No data available.

Substance Data:

Name	Result
2-aminoethanol	May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	Animal studies indicate that chronic exposure can cause damage to organs. Causes changes in tubules (including acute renal failure and necrosis) in intraperitoneal lethal-dose studies of mice; [RTECS]

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	Fish LC50 <i>Oncorhynchus mykiss</i> : >100 mg/L (96 hr)
	Aquatic Invertebrates EC50 <i>Daphnia magna</i> : 140 mg/L (48 hr [mobility])
	Aquatic Plants EC50 <i>Pseudokirchneriella subcapitata</i> : >60 mg/L (72 hr [growth rate])
2-(2-butoxyethoxy)ethanol	Fish LC50 <i>Leopomis macrochirus</i> : 1300 mg/L (96 h [mortality])
	Aquatic Plants EC50 <i>Desmodosmus subspicatus</i> : >100 mg/L (96 h [growth rate and biomass])
	Aquatic Invertebrates EC50 <i>Daphnia magna</i> : >100 mg/L (48 h [mobility])

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Name	Result
2-aminoethanol	Fish LC50 Cyprinus carpio: 349 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 27.04 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 2.8 mg/L (72 hr [growth rate])
Alcohols, branched and linear, ethoxylated	Fish LC50 Oncorhynchus mykiss: 5 - 7 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.5 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 1.4 mg/L (96 hr [cell number])

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	Fish NOEC Danio rerio: ≥ 35.1 mg/L (35 d)
	Aquatic Invertebrates NOEC Daphnia magna: 25 mg/L (21 d [reproduction])
2-aminoethanol	Fish NOEC Oryzias latipes: 1.24 mg/L (41 d)
	Aquatic Invertebrates NOEC Daphnia magna: 0.85 mg/L (21 d [reproduction])
Alcohols, branched and linear, ethoxylated	Fish NOEC Lepomis macrochirus: > 0.33 mg/L (30 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: 0.77 mg/L (21 d [reproduction])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	The substance is not readily biodegradable. 76% degradation, measured by O ₂ consumption, after 56 days.
2-(2-butoxyethoxy)ethanol	The substance is readily biodegradable (85% degradation in water, measured by O ₂ consumption, after 28 days).
2-aminoethanol	Substance is Readily biodegradable. >90 % degradation in water, measured by DOC removal, after 21 days.
Alcohols, branched and linear, ethoxylated	Substance is Readily biodegradable. 72% degradation in water, measured by inorganic C analysis, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	This substance is not expected to bioaccumulate. BCF (aquatic species): 1.8 L/kg
2-(2-butoxyethoxy)ethanol	The substance has a low potential for bioaccumulation based on log K _{ow} ≤ 3 .
2-aminoethanol	This substance is not expected to bioaccumulate (log P _{ow} = -2.3 at 25 °C)
Alcohols, branched and linear, ethoxylated	The substance has the potential to bioaccumulate (log P _{ow} = 3.3 - 3.73).

Mobility in Soil

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Product Data: No data available.

Substance Data:

Name	Result
Tetrasodium ethylenediamine tetraacetate	This substance is expected to be moderately mobile with a moderate potential for adsorption to soil and sediment. Calculated Koc: 312.7 dimensionless.
2-aminoethanol	This substance is moderately mobile; therefore, slight adsorption to soil is expected (log Koc >= 2.3 - <= 2.7).
Alcohols, branched and linear, ethoxylated	The substance is moderately mobile (log Koc: 1.575 - 2.365).

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

Tetrasodium ethylenediamine tetraacetate	This substance is not PBT.
2-(2-butoxyethoxy)ethanol	The substance is not PBT.
2-aminoethanol	This substance is not PBT.
Alcohols, branched and linear, ethoxylated	The substance is not PBT.

vPvB assessment:

Tetrasodium ethylenediamine tetraacetate	This substance is not vPvB.
2-(2-butoxyethoxy)ethanol	The substance is not vPvB.
2-aminoethanol	This substance is not vPvB.
Alcohols, branched and linear, ethoxylated	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:


It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	UN3267
UN Proper Shipping Name	Corrosive, liquid, basic, organic, N.O.S. (Monoethanolamine)
UN Transport Hazard Class(es)	8 
Packing Group	III

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Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	UN3267
UN Proper Shipping Name	Corrosive, liquid, basic, organic, N.O.S. (Monoethanolamine)
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	UN3267
UN Proper Shipping Name	Corrosive, liquid, basic, inorganic, N.O.S. (Monoethanolamine)
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None

SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

112-34-5	2-(2-butoxyethoxy)ethanol	Listed
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CERCLA:

112-34-5	2-(2-butoxyethoxy)ethanol	Listed	N/A
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RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

141-43-5	2-aminoethanol	Listed
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New Jersey Right to Know:

112-34-5	2-(2-butoxyethoxy)ethanol	Listed
141-43-5	2-aminoethanol	Listed

New York Right to Know:

112-34-5	2-(2-butoxyethoxy)ethanol	Listed
141-43-5	2-aminoethanol	Listed

Pennsylvania Right to Know:

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 05.24.2023

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112-34-5	2-(2-butoxyethoxy)ethanol	Listed
141-43-5	2-aminoethanol	Listed

California Proposition 65: None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 0-0-0

HMIS: 3-0-0-B

Initial Preparation Date: 05.24.2023

End of Safety Data Sheet