Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 07.07.2022

Revision date: 02.09.2024

Wheel Clean Concentrate

SECTION 1: Identification

Product Identifier

Product Name: Wheel Clean Concentrate

Product code: C-4200

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Not determined or not applicable.

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

Heiden Industries
1200 Veterans Blvd.
Kenner, LA. 70062
8008784913
TODD@HEIDENIND.COM

Emergency Telephone Number:

North America

CHEMTREC
800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Skin corrosion, category 1A
Serious eye damage, category 1
Skin sensitization, category 1
Carcinogenicity, category 2
Reproductive toxicity, category 1B
Specific target organ toxicity - single exposure, category 3, respiratory tract irritation
Specific target organ toxicity - single exposure, category 3, narcotic effects

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage

H317 May cause an allergic skin reaction
H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H360 May damage fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness

Precautionary Statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray
P264 Wash hands thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing must not be allowed out of the workplace
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P271 Use only outdoors or in a well-ventilated area
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/doctor/...
P321 Specific treatment (see ... on this label)
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+P352 IF ON SKIN: Wash with plenty of water/ ...
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P308+P313 IF exposed or concerned: Get medical advice/attention
P312 Call a POISON CENTER/doctor/.../if you feel unwell
P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed
P501 Dispose of contents/container to...

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 1310-58-3	Potassium hydroxide	<45
CAS Number: 68515-73-1	D-Glucopyranose, oligomers, decyl octyl glycosides	<42
CAS Number: 5064-31-3	Trisodium nitrilotriacetate	<40
CAS Number: 6834-92-0	Disodium metasilicate	<25
CAS Number: 5989-27-5	d-Limonene	<10

CAS Number: 68603-42-9	Amides, coco, N,N-bis(hydroxyethyl)	<5
CAS Number: 84133-50-6	Alcohols, C12-14-secondary, ethoxylated	<5
CAS Number: 56-81-5	Glycerol	<0.4
CAS Number: 111-42-2	2,2'-iminodiethanol	<0.25
CAS Number: 25322-68-3	Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	<0.15
CAS Number: 67-56-1	Methanol	<0.05

Additional Information: None

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 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 symptoms develop or persist, seek medical advice/attention.

After Skin Contact:

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.

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.

After Eye Contact:

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.

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.

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. Seek immediate medical 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. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

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

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

Inhalation may have adverse effects on the respiratory tract. Symptoms may include cough, breathing difficulties, sore throat and inflammation of the mucous membrane lining the respiratory tract.

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).

Suspected of causing cancer. Effects are dependent on exposure (dose, concentration, contact time).

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

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 respiratory symptoms persist, seek 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:

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:

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.

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.

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

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 container for future disposal. 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. Avoid breathing dust, mist, fumes, vapors or spray. 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).
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	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m³
	Glycerol	56-81-5	TLV-TWA: 10 mg/m³ (8 hr, Particles, insoluble or poorly soluble, not otherwise specified, inhalable)
	Glycerol	56-81-5	TLV-TWA: 3 mg/m³ (8 hr, Particles, insoluble or poorly soluble, not otherwise specified, respirable)
	Methanol	67-56-1	15-Minute STEL: 250 ppm
	Methanol	67-56-1	8-Hour TWA: 200 ppm
	2,2'-iminodiethanol	111-42-2	TWA: 1 mg/m³
NIOSH	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m³
	Methanol	67-56-1	IDLH: 6000 ppm
	Methanol	67-56-1	15-Minute STEL: 325 mg/m³ (250 ppm)
	Methanol	67-56-1	REL-TWA: 260 mg/m³ (200 ppm [up to 10 hr])
	2,2'-iminodiethanol	111-42-2	TWA: 15 mg/m³ (3 ppm)
United States(California)	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m³
	Glycerol	56-81-5	8-Hour TWA-PEL: 10 mg/m³ (Particulates not otherwise regulated, total dust)
	Glycerol	56-81-5	8-Hour TWA-PEL: 5 mg/m³ (Particulates not otherwise regulated, respirable fraction)
	Methanol	67-56-1	Ceiling Limit: 1000 ppm
	Methanol	67-56-1	15-Minute STEL: 325 mg/m³ (250 ppm)
	Methanol	67-56-1	8-Hour TWA-PEL: 260 mg/m³ (200 ppm)
	2,2'-iminodiethanol	111-42-2	PEL: 2 mg/m³ (0.46 ppm)
WEEL	d-Limonene	5989-27-5	8-Hour TWA: 165.5 mg/m³ (30 ppm)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	25322-68-3	8-Hour TWA: 10 mg/m³ (molecular weight >200 aerosol)
OSHA	Glycerol	56-81-5	8-Hour TWA-PEL: 15 mg/m³ (Mist, total)
	Glycerol	56-81-5	8-Hour TWA-PEL: 5 mg/m³ (Mist, respirable fraction)
	Methanol	67-56-1	8-Hour TWA-PEL: 260 mg/m³ (200 ppm)
	2,2'-iminodiethanol	111-42-2	TWA: 15 mg/m³ (3 ppm)

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Methanol	67-56-1	Methanol	Urine	End of shift	15 mg/L

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 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.
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. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

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	Not determined or not available.
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
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	Not determined or not available.
Solubilities	Not determined or not available.
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:

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
Potassium hydroxide	oral	LD50 Rat: 333 mg/kg
Trisodium nitrilotriacetate	oral	LD50 Rat: 1100 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5 mg/L (4 hr - Aerosol)
d-Limonene	oral	LD50 Rat: >2000 mg/kg
	dermal	LD50 Rabbit: > 5000 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	oral	LD50 Rat: > 2000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
2,2'-iminodiethanol	oral	LD50 Rat: 1100 mg/kg
Disodium metasilicate	dermal	LD50 Rat: > 5000 mg/kg
	oral	LD50 Rat: 1152 mg/kg
	inhalation	LC50 Rat: > 2.06 mg/L (4 hr [vapor])
Amides, coco, N,N-bis(hydroxyethyl)	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 rabbit: > 2000 mg/kg
Glycerol	oral	LD50 Rat: 27,200 mg/kg
	dermal	LD50 Guinea Pig: 56,750 mg/kg
	inhalation	LC50 Rat: > 5.85 mg/L (4 hr [Aerosol])
Methanol	Oral ATE	LD50 Rat: 100 mg/kg
	Dermal ATE	LD50 Rabbit: 300 mg/kg
	Inhalation ATE	LC50 Rat: 3 mg/L (4 hr [vapor])
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	dermal	LD50 Rat: >2000 mg/kg
	oral	LD50 Rat: >2000 mg/kg

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:
No data available.
Substance Data:

Name	Result
Disodium metasilicate	Causes severe skin burns.
Potassium hydroxide	Causes severe skin burns.
d-Limonene	Causes skin irritation.
2,2'-iminodiethanol	Causes skin irritation.
Amides, coco, N,N-bis(hydroxyethyl)	Causes skin irritation.
Alcohols, C12-14-secondary, ethoxylated	Causes skin irritation.

Serious Eye Damage/Irritation
Assessment:
Causes serious eye damage.
Product Data:
No data available.
Substance Data:

Name	Result
Disodium metasilicate	Causes serious eye damage.
Potassium hydroxide	Causes serious eye damage.
Trisodium nitrilotriacetate	Causes serious eye irritation.
D-Glucopyranose, oligomers, decyl octyl glycosides	Causes serious eye damage.
2,2'-iminodiethanol	Causes serious eye damage.
Amides, coco, N,N-bis(hydroxyethyl)	Causes serious eye damage.
Alcohols, C12-14-secondary, ethoxylated	Causes serious eye damage.

Respiratory or Skin Sensitization
Assessment:
May cause an allergic skin reaction.
Product Data:
No data available.
Substance Data:

Name	Result
d-Limonene	May cause an allergic skin reaction.

Carcinogenicity
Assessment:
Suspected of causing cancer.
Product Data: No data available.
Substance Data:

Name	Species	Result
Trisodium nitrilotriacetate		Suspected of causing cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Potassium hydroxide	Not Applicable
d-Limonene	Group 3
D-Glucopyranose, oligomers, decyl octyl glycosides	Not Applicable
Amides, coco, N,N-bis(hydroxyethyl)	Group 2B
Trisodium nitrilotriacetate	Group 2B
Disodium metasilicate	Not Applicable
Glycerol	Not Applicable
Methanol	Not Applicable
Alcohols, C12-14-secondary, ethoxylated	Not Applicable
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Not Applicable
2,2'-iminodiethanol	Group 2B

National Toxicology Program (NTP):

Name	Classification
Potassium hydroxide	Not Applicable
d-Limonene	Not Applicable
D-Glucopyranose, oligomers, decyl octyl glycosides	Not Applicable
Amides, coco, N,N-bis(hydroxyethyl)	Not Applicable
Trisodium nitrilotriacetate	Not Applicable
Disodium metasilicate	Not Applicable
Glycerol	Not Applicable
Methanol	Not Applicable
Alcohols, C12-14-secondary, ethoxylated	Not Applicable
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Not Applicable
2,2'-iminodiethanol	Not Applicable

OSHA Carcinogens:

Ingredient Name	CAS	OSHA Carcinogens Status
d-Limonene	5989-27-5	Yes
2,2'-iminodiethanol	111-42-2	Yes

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:

May damage fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
2,2'-iminodiethanol	Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment:

May cause respiratory irritation.

May cause drowsiness or dizziness.

Product Data:

No data available.

Substance Data:

Name	Result
Disodium metasilicate	May cause respiratory irritation.
Methanol	Causes damage to Optic nerve (nervus opticus), central nervous system.

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
2,2'-iminodiethanol	May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

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

Product Data:

No data available.

Substance Data:

Name	Result
d-Limonene	May be fatal if swallowed and enters airways.

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
d-Limonene	Fish LC50 Pimephales promelas: 0.72 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 0.307 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 0.32 mg/L (72 hr [growth rate])
D-Glucopyranose, oligomers, decyl octyl glycosides	Fish LC50 Danio rerio: 100.81 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodesmus subspicatus: 27.22 mg/L (72 hr [growth rate])
Trisodium nitrilotriacetate	Fish LC50 Pimephales promelas: 114 mg/L (96 hr)
	Aquatic Plants EC50 Desmodesmus subspicatus: >100 mg/L (72 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: 560 mg/L (96 hr [mortality])
Disodium metasilicate	Aquatic Plants EC50 Freshwater algae: 207 mg/L (72 hr [biomass; read-across])
	Fish LC50 Danio rerio: 210 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 1700 mg/L (48 hr [read-across])
Glycerol	Fish LC50 Oncorhynchus mykiss: 54,000 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (24 hr [mobility])
2,2'-iminodiethanol	Fish LC50 Oncorhynchus mykiss: 460 mg/L (96 hr)
	Aquatic Invertebrates EC50 Ceriodaphnia dubia: 30.1 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 9.5 mg/L (72 hr [growth rate])
Methanol	Fish LC50 Lepomis macrochirus: 15,400 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 18,260 mg/L (96 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 22,000 mg/L (96 hr [growth rate])
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Fish LC50 Poecilia reticulata: > 100 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodesmus subspicatus: >100 mg/L (72 hr [growth rate, Read-across substance data])

Chronic (Long-Term) Toxicity

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

Product Data: No data available.

Substance Data:

Name	Result
d-Limonene	Fish NOEC Fish: 0.08 mg/L (28 d [growth and hatchability, QSAR substance data])
	Aquatic Invertebrates NOEC Daphnia magna: 0.08 mg/L (21 d [reproduction])

Name	Result
D-Glucopyranose, oligomers, decyl octyl glycosides	Fish NOEC Danio rerio: 1.8 mg/L (28 d [read-across])
	Aquatic Invertebrates NOEC Daphnia magna: 2 mg/L (21 d [read-across])
Trisodium nitrilotriacetate	Aquatic Invertebrates LC50 Pagurus longicarpus: 1875 mg/L (7 d)
2,2'-iminodiethanol	Aquatic Invertebrates NOEC Daphnia magna: 0.78 mg/L (21 d [reproduction])
Methanol	Aquatic Invertebrates NOEC Daphnia magna: 208 mg/L (21 d [reproduction, QSAR substance data])
	Fish NOEC Pimephales promelas: 446.7 mg/L (28 d [QSAR substance data])
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Fish NOEC Salt water fish: 13,671.586 mg/L (28 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: 17,475.27 mg/L (21 d [immobilisation, Read-across substance data])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	The study on degradability does not need to be conducted as the substance is inorganic.
d-Limonene	The substance is readily biodegradable. 71.4% degradation in water, measured by CO2 evolution, after 28 days.
D-Glucopyranose, oligomers, decyl octyl glycosides	The substance is readily biodegradable in water. 100% degradation, measured by DOC removal, after 28 days.
Methanol	The substance is readily biodegradable. 97% degradation in water, measured by O2 consumption, after 20 days.
Trisodium nitrilotriacetate	Substance is readily biodegradable. >95% degradation in water, measured by DOC removal, after 28 days.
Disodium metasilicate	The biodegradation studies are not applicable to inorganic substances.
Glycerol	The substance is readily biodegradable. 94% degradation in water, measured by TOC removal, after 1 day.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is readily biodegradable. 74.85% degradation in water, measured by O2 consumption, after 28 days.
2,2'-iminodiethanol	The substance is readily biodegradable. 93% degradation in water, measured by O2 consumption, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	Not expected to bioaccumulate, as it completely dissociates in water.
2,2'-iminodiethanol	The substance is not expected to bioaccumulate (BCF= 9.16 L/kg & log Pow= -2.46 at 25 °C).
Trisodium nitrilotriacetate	Bioaccumulation is not expected. BCF (aquatic species): 3 L/kg ww
Disodium metasilicate	The substance has low potential for bioaccumulation.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is not expected to bioaccumulate (log Pow=0.2 at 30 °C & BCF= 3.162 L/kg at 25 °C, basis- whole body w.w.).

Name	Result
d-Limonene	The substance has the potential to bioaccumulate (BCF= 864.8 L/kg basis-whole body w.w., QSAR substance data).
Glycerol	The substance is not expected to bioaccumulate (log Pow= -1.75 at 25 °C).
Methanol	The substance is not expected to bioaccumulate (BCF= 4.5).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	Low potential for adsorption. If emitted to surface water, sorption to sediment will be negligible.
D-Glucopyranose, oligomers, decyl octyl glycosides	Substance is expected to be mobile (log Koc: 1.7); therefore, adsorption to soil is not expected.
Trisodium nitrilotriacetate	The substance has a low potential for adsorption to soil and sediment. log Kp (sediment-water): 1.6 L/kg
2,2'-iminodiethanol	The substance is expected to be highly mobile, therefore, adsorption to soil is not expected (calculated log Koc= 1).
Methanol	The substance is highly mobile, therefore, adsorption to soil is not expected (Koc= 0.13 - 0.61 dimensionless).
Amides, coco, N,N-bis(hydroxyethyl)	The substance is mobile, therefore adsorption to soil is not expected (log Koc = 1.60).
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is mobile, therefore adsorption to soil is not expected (log Koc= 1.857 dimensionless at 25 °C).
d-Limonene	The substance is slightly mobile, therefore, slight adsorption to soil is expected (Koc= 6324 L/kg, QSAR substance data).

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:

Disodium metasilicate	The PBT assessment does not apply to inorganic substances.
Potassium hydroxide	The substance is not PBT.
Trisodium nitrilotriacetate	The substance is not PBT.
d-Limonene	The substance is not PBT.
D-Glucopyranose, oligomers, decyl octyl glycosides	The substance is not PBT.
2,2'-iminodiethanol	The substance is not PBT.
Methanol	The substance is not PBT.
Glycerol	The substance is not PBT.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is not PBT.

vPvB assessment:

Potassium hydroxide	The substance is not vPvB.

Trisodium nitrilotriacetate	The substance is not vPvB.
d-Limonene	The substance is not vPvB.
D-Glucopyranose, oligomers, decyl octyl glycosides	The substance is not vPvB.
2,2'-iminodiethanol	The substance is not vPvB.
Methanol	The substance is not vPvB.
Disodium metasilicate	The vPvB assessment does not apply to this substance as it is inorganic.
Glycerol	The substance is not vPvB.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, 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	UN 1814
UN Proper Shipping Name	Potassium Hydroxide, solutions
UN Transport Hazard Class(es)	8 
Packing Group	II
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

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

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None

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:

5064-31-3	Trisodium nitrilotriacetate	Listed
67-56-1	Methanol	Listed
111-42-2	2,2'-iminodiethanol	Listed

CERCLA:

1310-58-3	Potassium hydroxide	Listed	1000 lb
67-56-1	Methanol	Listed	5000 lbs
111-42-2	2,2'-iminodiethanol	Listed	100 lbs

RCRA:

67-56-1	Methanol	Listed	U154

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

Massachusetts Right to Know:

1310-58-3	Potassium hydroxide	Listed
5064-31-3	Trisodium nitrilotriacetate	Listed
56-81-5	Glycerol	Listed
67-56-1	Methanol	Listed
111-42-2	2,2'-iminodiethanol	Listed

New Jersey Right to Know:

1310-58-3	Potassium hydroxide	Listed
5989-27-5	d-Limonene	Listed
56-81-5	Glycerol	Listed
67-56-1	Methanol	Listed
111-42-2	2,2'-iminodiethanol	Listed

New York Right to Know:

1310-58-3	Potassium hydroxide	Listed
5989-27-5	d-Limonene	Listed
67-56-1	Methanol	Listed
111-42-2	2,2'-iminodiethanol	Listed

Pennsylvania Right to Know:

1310-58-3	Potassium hydroxide	Listed
56-81-5	Glycerol	Listed
67-56-1	Methanol	Listed
111-42-2	2,2'-iminodiethanol	Listed

California Proposition 65:

⚠**WARNING:** This product can expose you to chemicals including Coconut oil diethanolamine condensate (cocamide diethanolamine) and 2,2'-iminodiethanol; which are known to the State of California to cause cancer; and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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: 0-0-0

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End of Safety Data Sheet