



SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: UF222 - Ultra Presoak 222

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Chemical cleaning products

Liquid detergent mixture for commercial car washes.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

National Carwash Solutions
1997 American Blvd
54115 De Pere - United States
Phone: 9203372175 - Fax: 9203379410
<https://ncswash.com>

Distributor:
Shiners Car Wash Systems Pty Ltd
12-14 Smeaton Avenue
Dandenong South 3175 Vic
Telephone: 61-3-9646 0999
1.4 Emergency phone number: CHEMTREC®
+(61)-290372994

1.4 Emergency phone number: 1-800-424-9300 or 1-703-527-3887

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

NFPA:

Health Hazards: 3

Flammability Hazards: 0

Instability Hazards: 0

Special Hazards: Non-applicable

29 CFR 1910.1200:

Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.

Eye Dam. 1: Serious eye damage, Category 1, H318

Skin Corr. 1A: Skin corrosion, Category 1A, H314

Skin Sens. 1: Sensitisation, skin, Category 1, H317

STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

NFPA:



29 CFR 1910.1200:

Danger



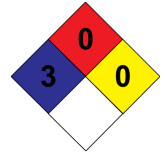
Hazard statements:

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage

Skin Sens. 1: H317 - May cause an allergic skin reaction

STOT SE 3: H335 - May cause respiratory irritation

Precautionary statements:



Date of compilation: 6/3/2019 Revised: 10/02/2024 Version: 3 (Replaced 2)

SECTION 2: HAZARD(S) IDENTIFICATION (continued)

P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P302+P352: IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Substances that contribute to the classification

Surfactant Mixture; Ethanediol; 2-aminoethanol; tetrasodium ethylene diamine tetraacetate

Acute Toxicity Estimate (ATE mix):

28.78 % (oral), 33.49 % (dermal), 41.76 % (inhalation) of the mixture consists of ingredient(s) of unknown toxicity

Additional labeling:

Keep out of the reach of children

2.3 Hazards not otherwise classified (HNOC):

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:








Non-applicable

3.2 Mixtures:

Chemical description: Aqueous mixture composed of chemical products for cleaning products

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: Non-applicable	Surfactant Mixture Eye Dam. 1: H318 - Danger 	15 - <35 %
CAS: 107-21-1	Ethanediol Acute Tox. 4: H302 - Warning 	5 - <10 %
CAS: 141-43-5	2-aminoethanol Acute Tox. 4: H302+H312+H332; Flam. Liq. 4: H227; Skin Corr. 1B: H314 - Danger 	5 - <10 %
CAS: 127087-87-0	4-Nonylphenol, branched, ethoxylated Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning 	5 - <10 %
CAS: 64-02-8	tetrasodium ethylene diamine tetraacetate Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger 	<5 %
CAS: 1310-73-2	sodium hydroxide Skin Corr. 1A: H314 - Danger 	<5 %
CAS: 5989-27-5	d-limonene Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning 	<5 %

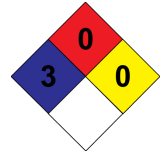
To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

Request medical assistance immediately, showing the SDS of this product.

- CONTINUED ON NEXT PAGE -



SECTION 4: FIRST-AID MEASURES (continued)

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and its inhalation, to the respiratory system. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

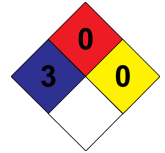
SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

- CONTINUED ON NEXT PAGE -



Date of compilation: 6/3/2019 Revised: 10/02/2024 Version: 3 (Replaced 2)

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

The characteristic of corrosivity per RCRA could apply to the unused product if it becomes a waste material. The EPA hazardous waste number D002 could apply. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing.

6.3 Methods and materials for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: -4 °F
Maximum Temp.: 120 °F

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

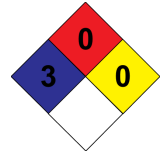
Substances whose occupational exposure limits have to be monitored in the workplace

Identification	Occupational exposure limits		
	8-hour TWA PEL	Ceiling Values - TWA PEL	
sodium hydroxide CAS: 1310-73-2			2 mg/m ³
2-aminoethanol CAS: 141-43-5	8-hour TWA PEL	3 ppm	6 mg/m ³
	Ceiling Values - TWA PEL		

8.2 Appropriate engineering controls:

A.- Individual protection measures, such as personal protective equipment

- CONTINUED ON NEXT PAGE -



Date of compilation: 6/3/2019 Revised: 10/02/2024 Version: 3 (Replaced 2)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

If product is used at the concentration dosing conditions specified in the relevant instructions for use (section 15), personal protective equipment described in section 8.2 for UNDILUTED products will not be required.


Safe handling recommendations for undiluted product:

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection


The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional /industrial users, we recommend using chemical protection gloves. Use gloves in accordance with manufacturer's use limitations and OSHA standard 1910.138 (29CFR)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application



D.- Ocular and facial protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration.
	Anti-slip work shoes	Replace before any evidence of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

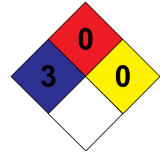
Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

National volatile organic compound emission standards (40 CFR Part 59):

- V.O.C. (Subpart C - Consumer): 15.47 % weight
- V.O.C. (Coatings) at 68 °F: 166.37 kg/m³ (166.37 g/L)

- CONTINUED ON NEXT PAGE -



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 68 °F:	Liquid
Appearance:	Transparent
Color:	Brown
Odor:	Citric
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	233 °F
Vapour pressure at 68 °F:	2166 Pa
Vapour pressure at 122 °F:	11421.44 Pa (11.42 kPa)
Evaporation rate at 68 °F:	Non-applicable *

Product description:

Density at 68 °F:	1075.6 kg/m³
Relative density at 68 °F:	1.076
Dynamic viscosity at 68 °F:	Non-applicable *
Kinematic viscosity at 68 °F:	Non-applicable *
Kinematic viscosity at 104 °F:	Non-applicable *
Concentration:	Non-applicable *
pH:	>13 at 100 %
Vapour density at 68 °F:	Non-applicable *
Partition coefficient n-octanol/water 68 °F:	Non-applicable *
Solubility in water at 68 °F:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>199.4 °F)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	458 °F
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

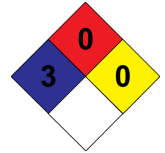
9.2 Other information:

Surface tension at 68 °F:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

- CONTINUED ON NEXT PAGE -



SECTION 10: STABILITY AND REACTIVITY (continued)

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

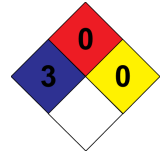
C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: 2,2'-iminodiethanol (2B); d-limonene (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- CONTINUED ON NEXT PAGE -



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Ethanediol CAS: 107-21-1	LD50 oral	500 mg/kg	Rat
	LD50 dermal	9530 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
2-aminoethanol CAS: 141-43-5	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1025 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (4 h)	Rat
d-limonene CAS: 5989-27-5	LD50 oral	4400 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8	LD50 oral	1700 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	2246.39 mg/kg (Calculation method)	28.78 %
Dermal	9472.25 mg/kg (Calculation method)	33.49 %
Inhalation	89.01 mg/L (4 h) (Calculation method)	41.76 %

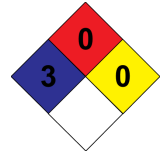
SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Identification	Acute toxicity		Species	Genus
Ethanediol CAS: 107-21-1	LC50	53000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	51000 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	24000 mg/L (168 h)	Selenastrum capricornutum	Algae
2-aminoethanol CAS: 141-43-5	LC50	349 mg/L (96 h)	Cyprinus carpio	Fish
	EC50	65 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Algae

- CONTINUED ON NEXT PAGE -



SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8	LC50	121 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	140 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
sodium hydroxide CAS: 1310-73-2	LC50	189 mg/L (48 h)	Leuciscus idus	Fish
	EC50	33 mg/L	Crangon crangon	Crustacean
	EC50	Non-applicable		
d-limonene CAS: 5989-27-5	LC50	0.702 mg/L (96 h)	Pimephales promelas	Fish
	EC50	0.577 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Ethanediol CAS: 107-21-1	BOD5	0.47 g O2/g	Concentration	100 mg/L
	COD	1.29 g O2/g	Period	14 days
	BOD5/COD	0.36	% Biodegradable	90 %
2-aminoethanol CAS: 141-43-5	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	21 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
d-limonene CAS: 5989-27-5	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Ethanediol CAS: 107-21-1	BCF	10
	Pow Log	-1.36
	Potential	Low
2-aminoethanol CAS: 141-43-5	BCF	3
	Pow Log	-1.31
	Potential	Low
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8	BCF	2
	Pow Log	-13
	Potential	Low
d-limonene CAS: 5989-27-5	BCF	660
	Pow Log	4.83
	Potential	High

12.4 Mobility in soil:

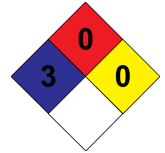
Identification	Absorption/desorption		Volatility	
Ethanediol CAS: 107-21-1	Koc	0	Henry	1.327E-1 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	4.989E-2 N/m (77 °F)	Moist soil	No
2-aminoethanol CAS: 141-43-5	Koc	0.27	Henry	3.7E-5 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	5.025E-2 N/m (77 °F)	Moist soil	No
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8	Koc	1046	Henry	0E+0 Pa·m ³ /mol
	Conclusion	Low	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
d-limonene CAS: 5989-27-5	Koc	6324	Henry	2533.13 Pa·m ³ /mol
	Conclusion	Immobile	Dry soil	Yes
	Surface tension	2.675E-2 N/m (77 °F)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

- CONTINUED ON NEXT PAGE -



Date of compilation: 6/3/2019 Revised: 10/02/2024 Version: 3 (Replaced 2)

SECTION 12: ECOLOGICAL INFORMATION (continued)

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to 49 CFR on the Transport of Dangerous Goods:



- 14.1 UN number: UN1824
- 14.2 UN proper shipping name: SODIUM HYDROXIDE SOLUTION
- 14.3 Transport hazard class(es): 8
Labels: 8
- 14.4 Packing group, if applicable: II
- 14.5 Marine pollutant: No
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

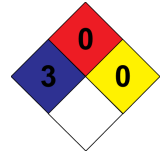


- 14.1 UN number: UN1824
- 14.2 UN proper shipping name: SODIUM HYDROXIDE SOLUTION
- 14.3 Transport hazard class(es): 8
Labels: 8
- 14.4 Packing group, if applicable: II
- 14.5 Marine pollutant: No
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:

- CONTINUED ON NEXT PAGE -



SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number: UN1824
- 14.2 UN proper shipping name: SODIUM HYDROXIDE SOLUTION
- 14.3 Transport hazard class(es): 8
Labels: 8
- 14.4 Packing group, if applicable: II
- 14.5 Marine pollutant: No
- 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

SARA Title III - Toxic Chemical Release Inventory Reporting (Section 313): Ethanediol
 California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986): Ethanediol
 The Toxic Substances Control Act (TSCA) : Ethanediol ; 2-aminoethanol ; 4-Nonylphenol, branched, ethoxylated ; tetrasodium ethylene diamine tetraacetate ; sodium hydroxide ; d-limonene
 Massachusetts RTK - Substance List: Ethanediol ; sodium hydroxide
 New Jersey Worker and Community Right-to-Know Act: Ethanediol ; 2-aminoethanol ; sodium hydroxide
 New York RTK - Substance list: Ethanediol ; 2-aminoethanol ; sodium hydroxide
 Pennsylvania Worker and Community Right-to-Know Law: Ethanediol ; 2-aminoethanol ; sodium hydroxide
 CANADA-Domestic Substances List (DSL): Ethanediol ; 2-aminoethanol ; 4-Nonylphenol, branched, ethoxylated ; tetrasodium ethylene diamine tetraacetate ; sodium hydroxide ; d-limonene
 CANADA-Non-Domestic Substances List (NDSL): Non-applicable
 NTP (National Toxicology Program): Non-applicable
 Minnesota - Hazardous substances ERTK: Ethanediol ; 2-aminoethanol ; sodium hydroxide
 Rhode Island - Hazardous substances RTK: Ethanediol ; 2-aminoethanol ; sodium hydroxide
 OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable
 Hazardous substances release notification under CERCLA sections 102-103 (40 CFR Part 302): Ethanediol (5000 pounds) ; sodium hydroxide (1000 pounds)

Relevant instructions for use:

Application Dilution Ratios
 Strongest Weakest Average ml per car / application
 Touchless In-Bay, Friction & Hybrid Systems
 1:100 1:150 1:120 20-40
 Self-Serve Presoak (4-7 mls per min), Prep
 Guns (3-6 mls per min), Hi Pressure Soap (7-25 mls per min),
 1:150 1:200 1:180

Required strength of product dilution will vary depending on cleaning conditions and type and condition of equipment used. Use Specific Gravity 1.09 in calculation of the usage.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The Toxic Substances Control Act (TSCA)
 Occupational Safety and Health Standards (1910 Subpart Z - Toxic and Hazardous Substances)



SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:

H318: Causes serious eye damage

H335: May cause respiratory irritation

H317: May cause an allergic skin reaction

H314: Causes severe skin burns and eye damage

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

Acute Tox. 4: H302 - Harmful if swallowed

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

Eye Dam. 1: H318 - Causes serious eye damage

Eye Irrit. 2: H319 - Causes serious eye irritation

Flam. Liq. 3: H226 - Flammable liquid and vapour

Flam. Liq. 4: H227 - Combustible liquid

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage

Skin Irrit. 2: H315 - Causes skin irritation

Skin Sens. 1: H317 - May cause an allergic skin reaction

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

CL50: Lethal Concentration 50

EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient

Koc: Partition coefficient of organic carbon

Manufacturer Disclaimer: The information contained in this safety data sheet ("SDS") is based on sources, technical knowledge and current legislation. Furthermore, is based on data believed to be accurate; thus, the company does not assume any liability for its accuracy. The information provided herein cannot be considered a guarantee of the properties of this product and the same is simply a description of the security requirements. The use, occupational methodology and/or conditions for users of this product are not within our awareness or control. It is ultimately the responsibility of the user(s) to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information of this SDS only refers to this product, which should not be used for purposes other than those specified. Finally, the manner in which this product is used and whether there is any infringement of patents is the sole responsibility of the user(s).

END OF SAFETY DATA SHEET