

SAFETY DATA SHEET

Issue Date 15-Jun-2016 Revision Date 21-Feb-2017 Version 2 Page 1 / 15

1. IDENTIFICATION

Product identifier

Product Name pPb-4 Neutralizer Solution

Other means of identification

Product Code(s) 2368855

Safety data sheet number M00618

UN/ID no UN1824***

Recommended use of the chemical and restrictions on use

Recommended Use Lead test reagent.

Uses advised against None. **Restrictions on use** None.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050***

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST***

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals***	Category 1***
Skin corrosion/irritation	Category 1***
Serious eye damage/eye irritation	Category 1***
Specific target organ toxicity (single exposure)	Category 3***

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word - Danger***

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Hazard statements

H290 - May be corrosive to metals***

H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation***

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P234 - Keep only in original container

P390 - Absorb spillage to prevent material damage***

Other Hazards Known

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable***

Mixture

Percent ranges are used where confidential product information is applicable.***

Chemical name	CAS No.	Percent Range	HMRIC #
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-***	77-86-1	10 - 20%	ı
Sodium hydroxide***	1310-73-2	1 - 5%	-
(+)-Tartaric acid***	87-69-4	1 - 5%	

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4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.***

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.***

Eye contactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.***

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.***

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get immediate medical

advice/attention.***

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth

resuscitation.***

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.***

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.***

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.***

Hazardous combustion products No information available.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear.

6. ACCIDENTAL RELEASE MEASURES

U.S. NoticeOnly persons properly qualified to respond to an emergency involving hazardous

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substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations

should respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Attention! Corrosive material. Evacuate personnel to

safe areas. Keep people away from and upwind of spill/leak.***

Other Information Refer to protective measures listed in Sections 7 and 8.***

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.***

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated

clothing and wash before reuse. Avoid breathing vapors or mists.***

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.***

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines **

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide***	Ceiling: 2 mg/m ^{3***}	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
CAS#: 1310-73-2		(vacated) Ceiling: 2 mg/m ^{3***}	Ceiling: 2 mg/m ^{3***}

Appropriate engineering controls

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Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hand Protection Wear suitable gloves. Impervious gloves.***

Eye/face protection Face protection shield.***

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.***

General Hygiene Considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this

product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.***

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not

allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance aqueous solution Color colorless

Odor None Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH 12.3 ***

Melting point/freezing point -3*** °C*** /*** 27*** °F***

Boiling point / boiling range 99*** °C*** /*** 210*** °F***

Evaporation rate 0.89 (water = 1)

Vapor pressure 24.002 mm Hg*** /*** 3.2 kPa*** at*** 25 °C*** Estimation based on theoretical

/*** 77 °F*** calculation ***

Vapor density (air = 1) 0.62 (air = 1) ***

Specific gravity (water = 1 / air = 1) 1.066

Partition Coefficient (n-octanol/water)

Not applicable***

Soil Organic Carbon-Water Partition

Not applicable***

Coefficient

Autoignition temperatureNo data availableDecomposition temperatureNo data availableDynamic viscosityNo data availableKinematic viscosityNo data available

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L***	25 °C*** /*** 77 °F***

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Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature
Acid	Soluble	> 1000 mg/L***	25 °C*** /*** 77 °F***

Other Information

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate

Aluminum Corrosion Rate

No data available

*** 320.04 mm/yr*** /*** 12.6 in/yr***

Volatile Organic Compounds (VOC) Content

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-***	77-86-1	No data available	-
Sodium hydroxide***	1310-73-2	No data available	-
(+)-Tartaric acid***	87-69-4	No data available	-

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

Method No information available

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

Not applicable***

Particle Size No information available
Particle Size Distribution No information available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None.

Possibility of Hazardous Reactions

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Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.***

Incompatible materials

Incompatible materials Oxidizing agent. Acids. Bases.***

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.***

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking,

headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal. May cause irritation of respiratory tract.***

Eye contact Causes burns. Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.***

Skin contact May cause irritation.***

Ingestion Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May

cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.***

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.***

Aggravated Medical Conditions Eye disorders. Skin disorders. Respiratory disorders. Preexisting eye disorders.***

Toxicologically synergistic

None known.

products

Toxicokinetics, metabolism and No information available.

distribution

Product Acute Toxicity Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.***

Acute Toxicity Estimations (ATE)

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available

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ATEmix (inhalation-gas) No information available

Ingredient Acute Toxicity Data

Oral Exposure Route

If available, see data below***

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Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and		
	type	dose	time		sources for data		
1,3-Propanediol,	Rat	5900***	None	None reported	Vendor SDS***		
2-amino-2-(hydroxym	LD ₅₀ ***	mg/kg***	reported				
ethyl)-***							
(10 - 20%)							
CAS#: 77-86-1							
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and		
	type	dose	time	_	sources for data		
Sodium hydroxide***	Rabbit	500***	None	None reported	No information available		
(1 - 5%)	LD ₅₀ ***	mg/kg***	reported	-			
CAS#: 1310-73-2							

Dermal Exposure Route If available, see data below***

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sodium hydroxide***	Rabbit	1350***	None	None reported	IUCLID (The International
(1 - 5%)	LD ₅₀ ***	mg/kg***	reported	•	Uniform Chemical Information
CAS#: 1310-73-2					Database)***

Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route If available, see data below

If available, see data below

If available, see data below

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

If available, see data below

Aspiration toxicity

No data available

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

If available, see data below***

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
1,3-Propanediol, 2-amino-2-(hydroxym ethyl)-*** (10 - 20%) CAS#: 77-86-1	Standard Draize Test***	Rabbit***	500*** mg***	4*** hours***	Not corrosive or irritating to skin***	ECHA (The European Chemicals Agency)***
Sodium hydroxide*** (1 - 5%) CAS#: 1310-73-2	Patch test***	Human***	20*** mg***	24*** hours***	Corrosive to skin***	RTECS (Registry of Toxic Effects of Chemical Substances)***

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ſ	(+)-Tartaric acid***	Existing human	Human***	None	None	Skin irritant***	Vendor SDS***
	(1 - 5%)	experience***		reported	reported		
-	CAS#: 87-69-4						

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

If available, see data below***

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
1,3-Propanediol, 2-amino-2-(hydroxym ethyl)-*** (10 - 20%) CAS#: 77-86-1	Standard Draize Test***	Rabbit***	100*** mg***	None reported	Mild eye irritant***	ECHA (The European Chemicals Agency)***
Sodium hydroxide*** (1 - 5%) CAS#: 1310-73-2	Standard Draize Test***	Rabbit***	0.05*** mg***	24*** hours***	Corrosive to eyes***	RTECS (Registry of Toxic Effects of Chemical Substances)***
(+)-Tartaric acid*** (1 - 5%) CAS#: 87-69-4	Existing human experience***	Human***	None reported	None reported	Corrosive to eyes***	Vendor SDS***

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route No data available. No data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route

If available, see data below.***

			,	-
Chemical name	Test method	Species	Results	Key literature references and sources for data
(+)-Tartaric acid*** (1 - 5%) CAS#: 87-69-4	None reported	Guinea pig***	Not confirmed to be a skin sensitizer***	Vendor SDS***

Respiratory Sensitization Exposure Route

If available, see data below.

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available.

No data available.

No data available.

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below
Inhalation (Gas) Exposure Route
If available, see data below
If available, see data below
If available, see data below

Product Carcinogenicity Data

Oral Exposure Route

Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
No data available
No data available
No data available

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Inhalation (Gas) Exposure Route

No data available

Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
1,3-Propanediol, 2-amino-2-(hydroxymethyl) -***	77-86-1	-	-	-	-
Sodium hydroxide***	1310-73-2	-	-	-	-
(+)-Tartaric acid***	87-69-4	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
Labor)	

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
If available, see data below
Inhalation (Vapor) Exposure Route
If available, see data below
Inhalation (Gas) Exposure Route
If available, see data below
If available, see data below
If available, see data below

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

If available, see data below***

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
(+)-Tartaric acid*** (1 - 5%) CAS#: 87-69-4	Mutation in microorganisms***	Salmonella typhimurium***	None reported	None reported	Negative test result for mutagenicity***	Vendor SDS***

Product Germ Cell Mutagenicity invivo Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Germ Cell Mutagenicity invivo Data

Oral Exposure Route

Dermal Exposure Route

If available, see data below

Product Reproductive Toxicity Data

Oral Exposure Route

Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
No data available
No data available
No data available
No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
If available, see data below
If available, see data below
If available, see data below

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Inhalation (Gas) Exposure Route

If available, see data below

12. ECOLOGICAL INFORMATION

Ecotoxicity **

Product Ecological Data

Aquatic toxicity

FishNo data availableCrustaceaNo data availableAlgaeNo data available

Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below***

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Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,3-Propanediol, 2-amino-2-(hydroxym ethyl)-*** (10 - 20%) CAS#: 77-86-1	96 hours***	None reported	LC ₅₀ ***	5083*** mg/L***	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite ^{TM***}
Sodium hydroxide*** (1 - 5%) CAS#: 1310-73-2	96 hours***	Oncorhynchus mykiss***	LC50***	45.4*** mg/L***	IUCLID (The International Uniform Chemical Information Database)***
(+)-Tartaric acid*** (1 - 5%) CAS#: 87-69-4	96 hours***	None reported	LC ₅₀ ***	150*** mg/L***	Vendor SDS***

Crustacea	If av	/ailable, see i	ingredient data	below***

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,3-Propanediol, 2-amino-2-(hydroxym ethyl)-*** (10 - 20%) CAS#: 77-86-1	48 Hours***	None reported	EC50***	400*** mg/L***	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite ^{TM***}
Sodium hydroxide*** (1 - 5%) CAS#: 1310-73-2	48 Hours***	Daphnia sp.***	EC50***	40.4*** mg/L***	IUCLID (The International Uniform Chemical Information Database)***
(+)-Tartaric acid*** (1 - 5%) CAS#: 87-69-4	48 Hours***	Ceriodaphnia dubia***	EC50***	87.26, 46.04 - 165.37*** mg/L***	ERMA (New Zealands Environmental Risk Management Authority)***

Algae	If av	ailable, see i	ngredient data b	elow***

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,3-Propanediol, 2-amino-2-(hydroxym ethyl)-*** (10 - 20%) CAS#: 77-86-1	96 hours***	None reported	EC50***	750*** mg/L***	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite ^{TM***}

Other Information

Persistence and degradability

Product Biodegradability Data

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No data available.

Ingredient Biodegradability Data

Chemical name	Test method	Biodegradation	Exposure	Results
			time	
Sodium hydroxide*** (1 - 5%)	None reported	None reported	None reported	Readily biodegradable***
CAS#: 1310-73-2			-1	3 11000

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water)

Not applicable***

Ingredient Bioaccumulation Data

Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable***

Water solubility

Water solubility classification	<u>Water solubility</u>	Water Solubility Temperature
Soluble	> 1000 mg/L***	25 °C*** /*** 77 °F***

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number D002***

Special instructions for disposal Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an

acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted

material to the drain. Flush system with plenty of water.

14. TRANSPORT INFORMATION

U.S. DOT

UN/ID no UN1824***

Proper shipping name Sodium Hydroxide Solution

Hazard Class 8***
Packing Group II***
Emergency Response Guide 60***

Number

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TDG ***

UN/ID no UN1824***

Proper shipping name Sodium Hydroxide Solution***

Hazard Class 8***
Packing Group II***

IATA **

UN/ID no UN1824***

Proper shipping name Sodium Hydroxide Solution***

Hazard Class 8***
Packing Group II***
ERG Code 60***

IMDG **

UN/ID no UN1824***

Proper shipping name Sodium Hydroxide Solution***

Hazard Class
Packing Group

8***

Note: No special precautions necessary.

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA Complies
DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

Complies **EINECS/ELINCS ENCS** Complies Complies **IECSC** Complies **KECL** Complies **PICCS** Complies **TCSI** Complies **AICS NZIoC** Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

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chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard
Chronic Health Hazard
Fire hazard
Sudden release of pressure hazard
No
Reactive Hazard
No

CWA (Clean Water Act)

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

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

CERCLA

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

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

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide***	X***	X***	X***
1310-73-2			

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sodium hydroxide***	180.0910***	21 CFR 184.1763***
(+)-Tartaric acid***	-	21 CFR 184.1099***

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

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Global Automotive Declarable Substance List (GADSL)

Not applicable

NFPA and HMIS Classifications

Г	NFPA	Health hazards - 3***	Flammability - 0	Instability - 0	Physical and Chemical
					Properties -
Γ	HMIS	Health hazards - 3***	Flammability - 0	Physical Hazards - 0	Personal protection - X
					- See section 8 for more
					information

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH Immediately Dangerous to Life or Health***

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

Issue Date 15-Jun-2016

Revision Date 21-Feb-2017

Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet

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