Issue Date 12-Jan-2015 Revision Date 06-Jan-2025 Version 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name HARD WATER DETERGENT

Other means of identification

Product Code S 5091 UN/ID No. UN1760

Recommended use of the chemical and restrictions on use
Recommended Use Dish Machine Detergent.
Uses advised against Use only as stated on label.

Details of the supplier of the safety data sheet

Supplier Summit Supply

25 Commercial Drive Unit 3A Brentwood, NH 03833 Phone: (603) 679-1222

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed Causes severe skin burns and eye damage



Appearance Clear Colorless Physical state Liquid Odor Bland

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

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

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

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

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

Wash contaminated clothing before reuse

Immediately call a POISON CENTER or doctor/physician

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

Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Rinse mouth. DO NOT induce vomiting Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Sodium Hydroxide	1310-73-2	10-30	*
Tetrasodium EDTA	64-02-8	1-5	*
Sodium Polyacrylate	9003-04-7	1-5	*

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

4. FIRST AID MEASURES

First aid measures

General advice Immediate medical attention is required.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. For severe burns, immediate medical attention is

required.

Eye contact Immediate medical attention is required Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes Keep eye wide open while rinsing Do not rub affected area Immediately flush with plenty of water. After initial flushing, remove any contact lenses

and continue flushing for at least 15 minutes

Inhalation Remove to fresh air. Call a physician or poison control center immediately. If not breathing,

give artificial respiration. If breathing is difficult, give oxygen.

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison

control center immediately.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms No Information available.

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. Treat

symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the 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 and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid

contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Should not be

released into the environment. Prevent further leakage or spillage if safe to do so. 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 upDike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Take

up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. After cleaning, flush away traces

with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handlingUse personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed

systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in

properly labeled containers.

Incompatible materials Incompatible with strong acids and bases. Incompatible with oxidizing agents. Strong acids.

Aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

	expectate minic establishe	a by the region operation	, 200.00.
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
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep

away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing

and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance Clear Colorless

Odor Bland Odor threshold No Information available

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

pH 13.0 +

Melting point/freezing point

Boiling point / boiling range

No Information available
No Information available

Flash point None

Evaporation rateFlammability (solid, gas)
No Information available
No Information available

Flammability Limits in Air

Upper flammability limit:No Information availableLower flammability limit:No Information availableVapor pressureNo Information availableVapor densityNo Information available

Specific Gravity 1.19 Water solubility Complete

Solubility in other solvents No Information available

Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Viscosity
Explosive properties
No Information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Strong acids. Aluminum.

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 InformationThe primary effects and toxicity of this material are due to it corrosive nature.

Inhalation Causes burns.

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

Skin Contact The product causes burns of eyes, skin and mucous membranes.

Ingestion Causes burns. Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg(Rat)	-	-
Sodium Hydroxide 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg(Rabbit)	-
Tetrasodium EDTA 64-02-8	= 1658 mg/kg (Rat)	-	-
Sodium Polyacrylate 9003-04-7	> 40 g/kg (Rat)	-	-
Sodium Hydroxyacetate 2836-32-0	= 7110 mg/kg (Rat)	-	-
Trisodium nitrilotriacetate 5064-31-3	= 1100 mg/kg (Rat)	-	> 5 mg/L (Rat)4 h

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to

eyes.

SensitizationNo Information available.Germ cell mutagenicityNo Information available.CarcinogenicityNo Information available.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Chronic toxicity
No Information available.
No Information available.
Chronic exposure to corro

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.

Possible risk of irreversible effects. EYES, Respiratory system, Skin.

Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Target organ effects

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

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

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D002

14. TRANSPORT INFORMATION

DOT

UN/ID No. UN1760

Proper shipping name Corrosive liquids, n.o.s.

Hazard Class 8
Packing Group ||

Special Provisions B2, IB2, TII, TP2, TP27

Description UN1760, Corrosive liquids, n.o.s. (Sodium Hydroxide), 8, II,

Emergency Response Guide 154

Number

<u>IATA</u>

UN/ID No. UN1760

Proper shipping name Corrosive liquids, n.o.s.

Hazard Class 8
Packing Group II
ERG Code 8L
Special Provisions A3

Description UN1760, Corrosive liquid, n.o.s. (Sodium Hydroxide), 8, II

IMDG

UN/ID No. UN1760

Proper shipping name Corrosive liquids, n.o.s.

Hazard Class 8
Packing Group II
EmS-No. F-A, S-B
Special Provisions 274

Description UN1760, Corrosive liquid, n.o.s. (Sodium Hydroxide), 8, II,

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Does not comply
AICS Complies

Legend:

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

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

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

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

SARA 311/312 Hazard Categories

Acute health hazard Yes Chronic Health Hazard Yes ____

Fire hazard No 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	-	-	Х

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

U.S. State Right-to-Know Regulations

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

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

Į	16. OTHER INFORMATION	
1		

NFPAHealth hazards3Flammability0Instability0Physical and Chemical Properties -HMISHealth hazards3Flammability0Physical hazards0Personal protection N/A

16 OTHER INCORMATION

Issue Date12-Jan-2015Revision Date06-Jan-2025

Revision Note

No Information available

Disclaimer

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

End of Safety Data Sheet