SAFETY DATA SHEET



Issue Date 19-Jun-2018

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

<u>Product identifier</u> Product Name	All Temp Automatic Dishwash
Other means of identification	

Other means of identification Product Code Synonyms

N303-14001 None

Details of the supplier of the safety data sheet			
Company Name	Nassco Inc. 5365 S. Moorland Road New Berlin, WI 53151 (800) 729-6726		
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 5
Acute toxicity - Dermal	Not classified
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview



Hazard statements May be harmful if swallowed

Causes severe skin burns and eye damage



Appearance Clear

Physical state Liquid

Odor None

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling 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 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 Drink plenty of water Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

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

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0.02% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Potassium Hydroxide	1310-58-3	7-13	*
Tetrapotassium Pyrophosphate	7320-34-5	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.
Ingestion	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	Any additional important symptoms and effects are described in Section 11: Toxicology
	Information.

Indication of any immediate medical attention and special treatment needed

Note to physiciansProduct 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 storm sewer drains, lakes, streams, ponds, estuaries, oceans or other surface water bodies. Should not be released into the environment. Dispose of according to all local city, state and federal rules and regulations.		
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	Dike 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 handling Use 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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Tetrasodium Pyrophosphate 7722-88-5	-	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³
Sodium Hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 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. Wear a face shield if splashing hazard exists.
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. 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
Color	Colorless
Odor	None
Odor threshold	No Information available

<u>Values</u> 13.0 - 14.0 1.155 < 25 cP @ 25°C No Information available None Remarks • Method

Evaporation rate Flammability (solid, gas)	No Information available No data available
Flammability Limits in Air	
Upper flammability limit:	No Information available
Lower flammability limit:	No Information available
Vapor pressure	No Information available
Vapor density	No Information available
Water solubility	Complete
Partition coefficient	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available

Other Information

Density	Lbs/Gal
VOC Co	ntent (%)

9.63 Not Applicable

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 Information	The primary effects and toxicity of this material are due to it corrosive nature.
Inhalation	Avoid breathing vapors or mists. Breathing of vapor can cause respiratory irritation and inflammation. Breathing of mist or liquid can cause burns to the respiratory tract.
Eye contact	Avoid contact with eyes. Corrosive. Causes severe eye damage.
Skin Contact	Avoid contact with skin. Corrosive. Contact with skin may cause severe irritation and burns.
Ingestion	May be harmful if swallowed. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Hydroxide	= 284 mg/kg (Rat)	-	-
1310-58-3			
Tetrapotassium Pyrophosphate	= 2980 mg/kg(Rat)	> 4640 mg/kg (Rabbit)	-
7320-34-5			

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.
Sensitization	No Information available.
Germ cell mutagenicity	No Information available.
Carcinogenicity	No Information available.
Reproductive toxicity	No Information available.
STOT - single exposure	No Information available.
STOT - repeated exposure	No Information available.
Chronic toxicity	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.
Target organ effects	EYES, Respiratory system, Skin.
Aspiration hazard	No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity

0.02% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document . ATEmix (oral) $4{,}149{.}00$

12. ECOLOGICAL INFORMATION

Ecotoxicity

2.02% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Potassium Hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-
Tetrapotassium Pyrophosphate 7320-34-5	-	100: 96 h Oncorhynchus mykiss mg/L LC50	100: 48 h water flea mg/L EC50
Sodium Tripolyphosphate 7758-29-4	-	1650: 48 h Leuciscus idus mg/L LC50	-
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	59.8: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Lepomis macrochirus mg/L LC50 static	610: 24 h Daphnia magna mg/L EC50
Sodium Hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-
Trisodium nitrilotriacetate 5064-31-3	560 - 1000: 96 h Chlorella vulgaris mg/L EC50	 93 - 170: 96 h Pimephales promelas mg/L LC50 flow-through 252: 96 h Lepomis macrochirus mg/L LC50 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static 72 - 133: 96 h Oncorhynchus mykiss mg/L LC50 static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 560 - 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 470: 96 h Pimephales promelas mg/L LC50 static 175 - 225: 96 h Lepomis macrochirus mg/L LC50 static 560 - 1000: 96 h Oryzias latipes mg/L LC50 114: 96 h Pimephales promelas mg/L LC50 	560 - 1000: 48 h Daphnia magna mg/L LC50

Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

Chemical Name	Partition coefficient
Potassium Hydroxide	0.65
1310-58-3	0.83

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.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Potassium Hydroxide	Toxic
1310-58-3	Corrosive

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

UN/ID No.	UN1760
Proper shipping name	Corrosive liquids, n.o.s.
Hazard Class	8
Packing Group	II
Special Provisions	B2, IB2, T11, TP2, TP27
Description	UN1760, Corrosive liquids, n.o.s. (contains Potassium Hydroxide), 8, II
<u>TDG</u> UN/ID No. Proper shipping name Hazard Class Packing Group Description	UN1760 Corrosive liquids, n.o.s. 8 II UN1760, Corrosive liquids, n.o.s. (contains Potassium Hydroxide), 8, II

15. REGULATORY INFORMATION

International Inventories		
TSCA	Complies	
DSL/NDSL	Complies	

Legend:

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

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

Yes
Yes
No
No
No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

	Quantities			Substances
Potassium Hydroxide 1310-58-3	1000 lb	-	-	Х

<u>CERCLA</u>

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium Hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-58-3			RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product has been evaluated and does not require warning labeling under California Proposition 65.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium Hydroxide 1310-58-3	Х	Х	х
Tetrasodium Pyrophosphate 7722-88-5	Х	X	Х
Sodium Trimetaphosphate 7785-84-4	-	X	х
Sodium Hydroxide 1310-73-2	Х	X	Х
Trisodium nitrilotriacetate 5064-31-3	-	X	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties -		
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection D		
Issue Date	19-Jun-20	18				
Revision Date	19-Jun-20	18				
Revision Note						
No Information available						
<u>Disclaimer</u>						
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