



SAFETY DATA SHEET

Issue Date 11-Oct-2021

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name Chlorinated Automatic Dishwash

Other means of identification

Product Code NL305

Synonyms None

Details of the supplier of the safety data sheet

Company Name Nyco Products Company
5332 Dansher Road,
Countryside, IL 60525
(708) 579-8100
nycoproducts.com

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 |
| Skin corrosion/irritation | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1 |

Label elements

Emergency Overview

Danger

Hazard statements

May be harmful if swallowed

Causes severe skin burns and eye damage



Appearance Clear

Physical state Liquid

Odor Mild Chlorine Bleach

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

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

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 |
|------------------------------|-----------|----------|--------------|
| Potassium Hydroxide | 1310-58-3 | 7-13 | * |
| Tetrapotassium Pyrophosphate | 7320-34-5 | 1-5 | * |
| Sodium Hypochlorite | 7681-52-9 | 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 | 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 | Do not rub affected area. Rinse 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. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician or poison control center immediately. |
| Ingestion | Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. 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 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 Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

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 Dam up. Dike far ahead of liquid spill for later disposal. Prevent product from entering drains. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. 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

Storage Conditions 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 Strong acids. Aluminum. Strong reducing agents. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

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 |
| 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 |
| Tetrasodium Pyrophosphate 7722-88-5 | - | (vacated) TWA: 5 mg/m ³ | TWA: 5 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 Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. 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 Mild Chlorine Bleach
Odor threshold No Information available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------|--------------------------|-------------------------|
| pH | 13.0 - 13.5 | |
| Specific Gravity | 1.17 | |
| Viscosity | <25 cP @ 25°C | |
| Melting point/freezing point | No Information available | |
| Flash point | None | |
| Boiling point / boiling range | 210 °F | |

| | |
|----------------------------|--------------------------|
| Evaporation rate | No Information available |
| Flammability (solid, gas) | 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 | 9.75 |
| VOC Content (%) | 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
Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods.

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

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. Inhalation of vapors in high concentration may cause severe irritation or burns to the respiratory tract. May cause sensitization by inhalation. |
| 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. May cause sensitization by skin contact. |
| 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 1310-58-3 | = 284 mg/kg (Rat) | - | - |
| Tetrapotassium Pyrophosphate 7320-34-5 | = 2980 mg/kg (Rat) | - | - |
| Sodium Hypochlorite 7681-52-9 | = 8.91 g/kg (Rat) | > 10000 mg/kg (Rabbit) | - |

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 May cause sensitization by inhalation and skin contact.

Germ cell mutagenicity No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------------------------|-------|---------|-----|------|
| Sodium Hypochlorite 7681-52-9 | - | Group 3 | - | - |

IARC (International Agency for Research on Cancer)
Group 3 -Not classifiable as a human carcinogen

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% 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) 4,120.10

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|----------------------|---|--|
| Tetrapotassium Pyrophosphate 7320-34-5 | - | 100: 96 h Oncorhynchus mykiss mg/L LC50 | 100: 48 h water flea mg/L EC50 |
| Sodium Hypochlorite 7681-52-9 | - | 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static | 0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static |
| Sodium Hydroxide 1310-73-2 | - | 45.4: 96 h Oncorhynchus mykiss mg/L LC50 static | - |

Persistence and degradability

No Information available.

Bioaccumulation

Bioaccumulative potential.

| Chemical Name | Partition coefficient |
|----------------------------------|-----------------------|
| Potassium Hydroxide 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 1310-58-3 | Toxic 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.

DOT

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 and Sodium Hypochlorite), 8, II
Emergency Response Guide Number 154

TDG

UN/ID No. UN1760
Proper shipping name Corrosive liquids, n.o.s.
Hazard Class 8
Packing Group II
Description UN1760, Corrosive liquids, n.o.s. (contains Potassium Hydroxide and Sodium Hypochlorite), 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

| | |
|--|-----|
| 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 contains the following substances which are regulated 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 |
|----------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Potassium Hydroxide 1310-58-3 | 1000 lb | - | - | X |
| Sodium Hypochlorite 7681-52-9 | 100 lb | - | - | X |

CERCLA

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 1310-58-3 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |
| Sodium Hypochlorite 7681-52-9 | 100 lb | - | RQ 100 lb final RQ RQ 45.4 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 | X | X | X |
| Sodium Hypochlorite 7681-52-9 | X | X | X |
| Sodium Hydroxide 1310-73-2 | X | X | X |
| Tetrasodium Pyrophosphate 7722-88-5 | X | X | X |
| Sodium Trimetaphosphate 7785-84-4 | - | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|---|
| NFPA | Health hazards 3 | Flammability 0 | Instability 0 | Physical and Chemical Properties - |
| HMIS | Health hazards 3 | Flammability 0 | Physical hazards 0 | Personal protection D |

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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