1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Name Metal Safe Liquid Automatic Dish Detergent

Other means of identification
Product Code NL471
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 Not classified
Acute toxicity - Dermal Not classified
Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1

Label elements
Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage

Appearance Clear Green
Physical state Liquid
Odor Nil
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
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see .? on this label)
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

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Metasilicate</td>
<td>6834-92-0</td>
<td>5-10</td>
<td>*</td>
</tr>
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</table>

*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.

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.

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 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
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 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

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.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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 Green

Color  
Green

Odor  
Nil

Odor threshold  
No Information available

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<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
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<td>Specific Gravity</td>
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<td>Viscosity</td>
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<td>Melting point/freezing point</td>
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<tr>
<td>Flash point</td>
<td>above 200°F</td>
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<tr>
<td>Boiling point / boiling range</td>
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<tr>
<td>Evaporation rate</td>
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<td>Flammability Limits in Air</td>
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<td>Upper flammability limit:</td>
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<tr>
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<tr>
<td>Vapor pressure</td>
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<tr>
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</tr>
<tr>
<td>Autoignition temperature</td>
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</tr>
<tr>
<td>Decomposition temperature</td>
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</tbody>
</table>

Other Information

| Density Lbs/Gal                   | 9.0                           |
| 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
Exposure to air or moisture over prolonged periods.

Incompatible materials
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

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
Do not taste or swallow. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
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<tr>
<td>Sodium Metasilicate</td>
<td>= 1153 mg/kg ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6834-92-0</td>
<td></td>
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</table>

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
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.

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) 13,368.00
12. ECOLOGICAL INFORMATION

Ecotoxicity

0.75% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
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<tr>
<td>Sodium Metasilicate 6834-92-0</td>
<td>-</td>
<td>210: 96 h Brachydanio rerio mg/L LC50 semi-static</td>
<td>216: 96 h Daphnia magna mg/L EC50</td>
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</table>

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.

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
Not regulated

TDG
Not regulated

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

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

US State Regulations

California Proposition 65
WARNING: This product can expose you to chemicals including Acetic acid, 2,2,-dichloro, which is known to the state of California to cause cancer, or birth defects or other reproductive harm. For More Information go to www.P65Warnings.ca.gov.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
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<td>0</td>
<td>Physical hazards 0</td>
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<th>Physical hazards</th>
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<td>3</td>
<td>0</td>
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Issue Date 02-Aug-2019
Revision Date 29-Mar-2018
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