



SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: LOW TEMP TERG MACHINE DISH DET
Product Code: 400000

Other means of identification:

Product Description: Recommended Use: Institutional dish machine detergent

Uses advised against: No information available
Synonyms: 4LMDC

Recommended use of the chemical and restrictions on use:

Chemical distributor, or other responsible party Name, address, and telephone number:

Distributor Name: North Woods
Address: 4415 S. Taylor Drive
Sheboygan, WI 53081
General Phone Number: 800-242-7694

Emergency phone number:

Emergency Phone Number: Infotrac (800) 535-5053
Website: www.northwoodstm.com

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:



Signal Word: Danger

GHS Class: Classification:
This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Corrosion/Irritation - Category 1 Subcategory 1A
Serious Eye Damage/Eye Irritation - Category 1

GHS Label elements, including precautionary statements:
Hazard Not Otherwise Classified (HNOC):
Not applicable

Other information:
Harmful to aquatic life with long lasting effects

No information available.

Hazard Statements: Causes severe skin burns and eye damage.

Precautionary Statements: Do not breathe dust/fume/gas/mist/vapours/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Immediately call a POISON CENTER or doctor/physician.
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): 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.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Store locked up.
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified that have been identified during the classification process:

Emergency Overview: Appearance: Clear
Physical State: Liquid.
Odor: No information available

Sodium hydroxide

Route of Exposure: Inhalation, Eye Contact, Skin Contact, Ingestion
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Signs/Symptoms: Symptoms related to the physical, chemical and toxicological characteristics:
Symptoms: No information available.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Sodium hydroxide	1310-73-2	10-20% by weight	

SECTION 4 : FIRST AID MEASURES

Description of necessary measures:

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Immediate medical attention is required.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion: Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Indication of immediate medical attention and special treatment needed:

Note to Physicians: Treat symptomatically.
Notes : Most important symptoms/effects, acute and delayed:
Most Important Symptoms/Effects: No information available.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media: Sensitivity to Mechanical Impact: None.

Special protective equipment and precautions for fire-fighters:

Protective Equipment: 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.
Fire Fighting Instructions: Specific Hazards Arising from the Chemical:
No information available

NFPA Ratings:

NFPA Health: 3
NFPA Flammability: 0
NFPA Reactivity: 1



SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material can cause surfaces to become very slippery.

Environmental precautions:

Environmental Precautions: Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up:

Methods for containment: Stop leak if you can do it without risk.
Methods for cleanup: Contain spill, dilute with water and neutralize as required. Wash away small spills with plenty of water. Large spillage: Soak up with inert absorbent material.

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling.

Hygiene Practices: Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities:

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep from freezing. Keep container closed when not in use.

Incompatible Products: Strong oxidizing agents. Aluminium. Soft metals.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls: Showers
Eyewash stations
Ventilation systems

Individual protection measures:

Eye/Face Protection: Chemical resistant goggles must be worn. Face-shield.

Skin Protection Description: Rubber boots. Apron. Rubber gloves. Neoprene gloves.

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Liquid
Appearance: Clear

Odor: No information available

Odor Threshold: No information available

Boiling Point: > 100 deg C / > 212 deg F
Remarks/ - Method: None known

Melting Point: No data available
Remarks/ - Method: None known

Density: Relative: No data available
Remarks/ - Method: None known

Specific Gravity: 1.22
Remarks/ - Method: None known

Solubility: Solubility in other solvents: No data available
Remarks/ - Method: None known

Vapor Density: No data available
Remarks/ - Method: None known

Vapor Pressure: No data available
Remarks/ - Method: None known

Evaporation Rate: No data available
Remarks/ - Method: None known

pH: 12.8
Remarks/ - Method: (4 % solution)

Coefficient of Water/Oil Distribution: n-octanol/water: No data available
Remarks/ - Method: None known

Flash Point: No data available

Flash Point Method: Remarks/ - Method: None known

Lower Flammable/Explosive Limit: In Air: No data available

Upper Flammable/Explosive Limit: In Air: No data available

Auto Ignition Temperature: No data available
Remarks/ - Method: None known

Explosive Properties: No data available

Oxidizing Properties: No data available

VOC Content: (%): No data available

9.2. Other information:

Notes : Flammability (solid, gas): No data available
Remarks/ - Method: None known

SECTION 10 : STABILITY and REACTIVITY

Reactivity:

Reactivity: No data available.
Possibility of hazardous reactions:
None under normal processing.

Chemical Stability:

Chemical Stability: Stable under recommended storage conditions.

Conditions To Avoid:

Conditions to Avoid: Spills or careless handling. Incompatible products.

Incompatible Materials:

Incompatible Materials: Strong oxidizing agents. Aluminium. Soft metals.

Hazardous Decomposition Products:

Special Decomposition Products: None known based on information supplied.

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Sodium hydroxide :

Eye: Causes serious eye damage.

Skin: Causes severe skin burns.

Numerical measures of toxicity - Product:
The following values are calculated based on section 3 of the GHS document:
LD50 Dermal: 3034 mg/kg; Acute toxicity estimate

Inhalation: May cause irritation of respiratory tract.

Ingestion: May be harmful if swallowed.

Chemical Name: Sodium hydroxide
LD50 Dermal: 1350 mg/kg (Rabbit)

Numerical measures of toxicity - Product:
The following values are calculated based on section 3 of the GHS document:
LD50 Oral: 25000 mg/kg; Acute toxicity estimate

Sensitization: No information available.

Mutagenicity: No information available.

Reproductive Toxicity: No information available.

SECTION 12 : ECOLOGICAL INFORMATION

Sodium hydroxide :

Ecotoxicity:

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Chemical Name: Sodium hydroxide
Toxicity to Fish:
LC50 96 h: = 45.4 mg/L static (Oncorhynchus mykiss)

Persistence and degradability:

Biodegradation: Persistence and Degradability: No information available.

Bioaccumulative potential:

Bioaccumulation: No information available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Dispose of in accordance with federal, state, and local regulations.

Contaminated Packaging: Do not re-use empty containers.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Corrosive liquids, n.o.s.

DOT UN Number: UN1760
 DOT Hazard Class: 8
 DOT Packing Group: II

 IATA Shipping Name: Corrosive liquids, n.o.s.
 IATA UN Number: UN1760
 IATA Packing Group: 8

 Canadian Shipping Name: Corrosive liquids, n.o.s.
 Canadian UN Number: UN1760
 Canadian Hazard Class: 8
 IMDG UN Number : UN1760
 IMDG Shipping Name : Corrosive liquids, n.o.s.
 IMDG Hazard Class : 8
 IMDG Packing Group : II
 RID UN Number : UN1760
 RID Shipping Name : Corrosive liquids, n.o.s.
 RID Hazard Class : 8
 RID Packing Group : II
 ICAO UN Number : UN1760
 ICAO Shipping Name: Corrosive liquids, n.o.s.
 ICAO Hazard Class : 8
 ICAO Packing Group : II
 Notes : ADN:
 Proper Shipping Name: Corrosive liquid, n.o.s.
 Hazard Class: 8
 Packing Group: II
 Classification Code: C9
 Special Provisions: 274
 Description: UN1760, Corrosive liquid, n.o.s. (Sodium hydroxide, Potassium hydroxide), 8, II
 Limited Quantity: 1 L

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 3
 HMIS Fire Hazard: 0
 HMIS Reactivity: 1
 HMIS Personal Protection: X

Health Hazard	3
Fire Hazard	0
Reactivity	1
Personal Protection	X

SDS Revision Date: October 05, 2017

MSDS Revision Notes: New format

*Denotes changes from last version.Supersedes: 04-Dec-2012

Disclaimer: To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may be present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond our control, we will not be responsible for loss, injury, or expense arising out of the product's improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. This user is responsible for full compliance.