SAFETY DATA SHEET

Section 1 - Identification

Product Identifier
PROLEX LTD-220 Heavy Duty Multi-Temp Machine Detergent

Other means of identification
1121

Recommended use
Alkaline cleaner.

Recommended restrictions
For commercial and industrial use only.

Manufacturer / Importer / Supplier / Distributor Information

Company Name
National Chemical Laboratories of PA, Inc.

Address
401 N. 10th Street - Philadelphia, PA 19123

Telephone
1 (215) 922-1200

Supplier Email
info@nclonline.com

Contact
CHEM-TEL

Emergency Phone
1 (800) 255-3924

OSHA defined hazards
Not Classified.

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

Physical Hazards
Not Classified

Health Hazards
Serious eye damage/eye irritation
Skin corrosion/irritation

OSHA defined hazards
Not Classified.

Label Elements

Hazard Symbol

Signal Word
Danger

Hazard Statement
Causes severe skin burns and eye damage.

Precautionary statement

Prevention
Do not breathe spray or mist. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection.

Response
If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
None known.

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components

Ingredient Name | CAS #  | %
--- | --- | ---
Sodium Hydroxide | 1310-73-2 | 5 - 10
Disodium metasilicate | 6834-92-0 | 1 - 5

Section 4 - First-aid Measures

Inhalation
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low.
SAFETY DATA SHEET

Most Important symptoms /effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5 - Fire-fighting measures

Suitable extinguishing media

Powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment /instructions

Move containers from fire area if you can do it without risk.

General fire hazards

No unusual fire or explosion hazards noted.

Specific Methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures.

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and storage

Precautions for safe handling

Do not breathe spray or mist. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 - Exposure control/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>TWA</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>Ceiling</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide (CAS 1310-73-2)</td>
<td>Ceiling</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

If use of product risks exposure to contact, wear safety glasses with side shields.

Skin protection

Hand protection

Impervious gloves are recommended for prolonged use.

Other

If use of product risk exposure to contact, wear suitable protective clothing.
Section 9 - Physical and chemical properties

Appearance
- Physical state: Liquid.
- Form: Clear, thin liquid.
- Color: Red.
- Odor: Odorless.
- Odor threshold: Not available.
- pH: 13.7
- Melting point/freezing point: Not available.
- Initial boiling point and boiling range: 212 °F (100 °C)
- Flash point: None to boiling.
- Evaporation rate: Not available.
- Flammability (solid, gas): Not applicable.
- Upper/lower flammability or explosive limits:
  - Flammability limit - lower (%): Not available.
  - Flammability limit - upper (%): Not available.
  - Explosive limit - lower (%): Not available.
  - Explosive limit - upper (%): Not available.
- Vapor pressure: Similar to water.
- Vapor density: Similar to water.
- Relative density: 1.28 ± 0.01
- Relative density temperature: 75 °F (23.9 °C)
- Solubilities (water): Completely Soluble
- Partition Coefficient: n-octanol/water: Not available
- Auto-ignition temperature: Not Available
- Decomposition temperature: Not Available
- Viscosity: < 10 cSt
- Viscosity Temperature: 75 °F (23.9 °C)

Section 10 - Stability and reactivity

Reactivity: Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to Avoid: Do not mix with other chemicals. Contact with incompatible materials.
Incompatible materials: Strong Acids, Acids, Oxidizing Agents.
Hazardous Decomposition Products: No hazardous decomposition products are known.

Section 11 - Toxicological information

Information on likely routes of exposure
- Ingestion: Causes digestive tract burns.
- Inhalation: May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
- Skin contact: Causes severe skin burns.
- Eye contact: Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects.
- Acute toxicity: Not expected to be acutely toxic.

<table>
<thead>
<tr>
<th>Components</th>
<th>Level</th>
<th>Type</th>
<th>Code</th>
<th>Species</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate (CAS 6834-92-0)</td>
<td>Acute</td>
<td>Dermal</td>
<td>LD50</td>
<td>Rat</td>
<td>&gt;5000 mg/kg, 24 hours</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Inhalation</td>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 2.06 mg/L, 4 hours</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Mouse</td>
<td>661.5 - 896.3 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
<td>Rat</td>
<td>994.7 - 1335.9 mg/kg</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

Sodium Hydroxide (CAS 1310-73-2)

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>Serious eye damage/ eye irritation</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Not a respiratory sensitizer.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>This product is not expected to cause skin sensitization.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>This product is not expected to cause reproductive or developmental effects.</td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not an aspiration hazard.</td>
</tr>
<tr>
<td>Chronic effects</td>
<td>Prolonged inhalation may be harmful.</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Mobility in general
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - Disposal considerations

Disposal instructions
Dispose in accordance with applicable federal, state, and local regulations.

Local disposal regulations
Dispose of in accordance with local regulations.

Hazardous waste code
Waste codes should be assigned by the user based on the application for which the product was used.

Waste from residues / unused products
Dispose in accordance with all applicable regulations.

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

DOT
UN number: UN1824
Proper shipping name: SODIUM HYDROXIDE SOLUTION
Transport hazard class(es): 8
Packing group: II
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Special provisions: B2, IB2, N34, T7, TP2
Packaging exemption: 154
Packaging non bulk: 202
Packaging bulk: 242

IATA
UN number: UN1824
UN proper shipping name: SODIUM HYDROXIDE SOLUTION
Transport hazard class(es): 8
Packing group: II
Environmental hazards: No.
ERG Code: 8L
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number: UN1824
UN proper shipping name: SODIUM HYDROXIDE SOLUTION
Transport hazard class(es): 8
Packing group: II
SAFETY DATA SHEET

Environmental hazards
No.

Marine pollutant

EmS
F-A, S-B

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Transportation in bulk
This substance/mixture is not intended to be transported in bulk.

Section 15 - Regulatory Information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Components:
Sodium Hydroxide (CAS 1310-73-2) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories
Immediate Hazard Yes
Delayed Hazard No
Fire Hazard No
Pressure Hazard No
Reactivity Hazard No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting) Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) List Not listed.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.
Safe Drinking Water Act (SDWA) Not regulated.
Food and Drug Administration (FDA) Not regulated.

US state regulations
US. Massachusetts RTK - Substance List Components
Sodium Hydroxide (CAS 1310-73-2)

US. New Jersey Worker and Community Right-to-Know Act Components
Sodium Hydroxide (CAS 1310-73-2)

US. Pennsylvania RTK - Hazardous Substances Components
Sodium Hydroxide (CAS 1310-73-2)

US. Rhode Island RTK Components
Sodium Hydroxide (CAS 1310-73-2)

US - California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td>United States Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 - Other information, including date of preparation or last version

Revision date 1/17/2018
Version # 02
Disclaimer

The information contained herein 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 for use, handling, storage and disposal of this product are beyond the manufacturer's control, it is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense arising from the product's improper use. No warranty, expressed or implied, regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various government agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.