Section 1: Product and Company Identification
Product Name: Sodium Hydroxide, 2N Solution, carbonate-free
Synonym: none
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
  Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
  Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day
CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification
2.1 Classification of the substance or mixture
GHS Pictograms

GHS05

GHS Categories
GHS05: Corrosive
  Skin corr. 1A  H314: Causes severe burns and eye damage.
  Eye dam. 1  H318: Causes serious eye damage.

2.2 Label elements

Hazard pictograms

GHS05

Signal Word: DANGER

Hazard-determining components of labeling:
Sodium hydroxide

Hazard statements
H314  Causes severe skin burns and eye damage.

Precautionary statements
P303+P361+P353  IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
2.3 Other hazards

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Label: C; Corrosive
Hazard-determining components of labeling: Sodium Hydroxide

**Risk phrases:**
35 - Causes severe burns.

**Safety phrases:**
26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 - This material and its container must be disposed of as hazardous waste

**Health Effects:**
NFPA Hazard Rating: Health: 3; Fire: 0; Reactivity: 0
HMIS® Hazard Rating: Health: 4; Fire: 0; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

**Emergency overview**
Appearance: Colorless Liquid
Immediate effects: ND

**Potential health effects**
Primary Routes of entry: Ingestion, inhalation, skin and eye contact.
Signs and Symptoms of Overexposure: ND
Eyes: Causes eye damage.
Skin: Causes severe skin burns.
Ingestion: Harmful if swallowed.
Inhalation: Harmful by inhalation.
Chronic Exposure: ND
Chemical Listed As Carcinogen Or Potential Carcinogen: No
See Toxicological Information (Section 11)

**Potential environmental effects**
See Ecological Information (Section 12)

**Results of PBT and vPvB assessment:** A Chemical Safety Assessment has not been carried out.
PBT: Not applicable.
vPvB: Not applicable.

---

### Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</th>
<th>%</th>
<th>OSHA PEL mg/m³</th>
<th>ACGIH TLV mg/m³</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA regulated Carcinogen</th>
</tr>
</thead>
</table>

---
**Section 4: First Aid Measures**

If accidental overexposure is suspected

General information: Immediately remove any clothing soiled by the product.

Eye(s) Contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Inhalation: In case of unconsciousness, place patient stably in side position for transportation.

Ingestion: Drink plenty of water and provide fresh air. Call for a doctor immediately.

**Note to physician**

Treatment: No further relevant information available.

Medical Conditions generally Aggravated by Exposure: ND

**Section 5: Fire Fighting Measures**

Flash Point: Not applicable.

Flammable Limits: Product is not flammable.

Auto-ignition point: ND

Fire Extinguishing Media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Fire Fighting Procedures: ND

Unusual Fire and Explosion Hazards: ND

Hazardous combustion products: ND

DOT Class: Corrosive

**Section 6: Accidental Release Measures**

Steps to be taken in Case Material is Released or Spilled:

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:** Dilute with plenty of water.

**Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not allow to enter sewers/surface or ground water.

**Waste Disposal Methods:** Dispose of waste according to Federal, State and Local Regulations.

**Section 7: Handling and Storage**

Precautions to be taken in Handling and Storage: Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep container tightly sealed.

Storage temperature: NA

Storage Pressure: NA

**Section 8: Exposure Controls / Personal Protection**

Ingredients with limit values that require monitoring at the workplace: 1310-73-2 sodium hydroxide. WEL:

Short-term value: 2 mg/m³.

**Engineering Controls**

Ventilation required: Ensure good ventilation/exhaustion at the workplace.

**Personal Protection Equipment**

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Skin protection: Wear protective gloves and clothing.

Eye protection: Tightly sealed goggles.

Additional clothing and/or equipment: ND

**Exposure Guidelines**
See Composition/Information on Ingredients (Section 3)

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**Section 9 Physical and Chemical Properties**
Appearance and Physical State: Liquid, Colorless
Odor (threshold): Odorless (Not determined).
Specific Gravity (H₂O=1): 1.0904 g/cm³
Vapor Pressure at 20°C: 23 hPa
Vapor Density (air=1): Not determined.
Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): ND
Boiling Point: 100°C
Freezing point / melting point: ND
pH: ND
Solubility in Water: Fully miscible.
Molecular Weight: ND
Solvent content:
- Organic solvents: 0.0 %
- Water: 92.0 %
- VOC (EC) 0.00 %
Solids content: 8.0 %

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**Section 10: Stability and Reactivity**
Stability: ND
Conditions to Avoid: ND
Materials to Avoid (Incompatibility): ND
Hazardous Decomposition Products: None known.
Hazardous Polymerization: ND

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**Section 11: Toxicological Information**
Results of component toxicity test performed:
Acute toxicity: Oral LD₅₀: 2000 mg/kg (rat).
Primary irritant effect:
- On the skin: Strong caustic effect on skin and mucous membranes.
- On the eye: Strong caustic effect.
Sensitization: No sensitizing effects known.
Human experience: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

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**Section 12: Ecological Information**
Aquatic toxicity: ND
Persistence and degradability: ND
Bioaccumulative potential: ND
Mobility in soil: ND
General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or un-neutralized.

Chemical Fate Information: ND

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**Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: None

Waste treatment methods: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Un-cleaned packaging: Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

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**Section 14: Transportation Information**

**US DOT Information:** Proper shipping name: Sodium Hydroxide Solution

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Packaging group</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>II</td>
<td>UN1824</td>
</tr>
</tbody>
</table>

**IATA:** Proper shipping name: Sodium Hydroxide Solution

<table>
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<th>Hazard Class</th>
<th>Packaging group</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
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<td>8</td>
<td>II</td>
<td>UN1824</td>
</tr>
</tbody>
</table>

**IMO:** Proper shipping name: Sodium Hydroxide Solution

<table>
<thead>
<tr>
<th>Class</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>UN1824</td>
</tr>
</tbody>
</table>

Marine Pollutant: No

**Canadian TDG:** Proper shipping name: Sodium Hydroxide Solution

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**Section 15: Regulatory Information**

**United States Federal Regulations**


SARA: Section 355 (extremely hazardous substances): None of the ingredients is listed.

SARA Title III: Section 313 (Specific toxic chemical listings): None of the ingredients is listed.

RCRA: None

TSCA: All ingredients are listed.

CERCLA: ND

**State Regulations**

California Proposition 65: Not listed.

**Carcinogenic categories:**

- EPA (Environmental Protection Agency): None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH): None of the ingredients is listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed.

**International Regulations**

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Canada WHMIS: ND

Europe EINECS Numbers: 215-185-5

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**Section 16: Other Information**

Label Information: Corrosive
European Risk and Safety Phrases: See Section 2.
European symbols needed: See Section 2.
Canadian WHMIS Symbols: ND

**Abbreviations used in this document**
NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

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