

## **Safety Data Sheet**

Product No. 19540 Sodium Hydroxide, 2N Solution, carbonate-

free

**Issue Date (03-12-12)** 

**Review Date (04-03-15)** 

**Section 1: Product and Company Identification** 

Product Name: Sodium Hydroxide, 2N Solution, carbonate-free

Synonym:

**Company Name** 

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

#### **Section 2: Hazard Identification**

Classification of the substance or mixture GHS Pictograms:



GHS Categories:

GHS05: Corrosive

**Hazard statements** 

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

**Signal Word: DANGER** 

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

Results of PBT and vPvB assessment: A Chemical Safety Assessment has not been

carried out.

PBT: Not applicable. vPvB: Not applicable.

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)

### **Section 3: Composition / Information on Ingredients**

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP Carcinogen	IARC Carcinogen	OSHA regulated Carcinogen
Sodium Hydroxide (1310-73-2) EINECS: 215-185-5	2.5- 10	2	2	No	No	No

#### **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.

Storage temperature: Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required. Further information about storage conditions: Keep container tightly sealed.

Storage Pressure: NA

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

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

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.

### **Engineering Controls**

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

## **Personal Protection Equipment**

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.

Protective gloves: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves**: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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)

## **Section 9 Physical and Chemical Properties**

Appearance and Physical State: Liquid, Colorless Odor (threshold): Odorless (Not determined). Specific Gravity (H<sub>2</sub>O=1): 1.0904 g/cm<sup>3</sup>

Vapor Pressure at 20°C: 23 hPa

Vapor Density (air=1): Not determined.

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): Not determined.

Boiling Point: 100°C

Freezing point / melting point: Not determined

pH: Not determined.

Solubility in Water: Fully miscible.

Molecular Weight: NA

Solvent content:

Organic solvents: 0.0 %

Water: 92.0 % VOC (EC) 0.00 % Solids content: 8.0 %

## Section 10: Stability and Reactivity

Stability: ND

Conditions to Avoid: No further relevant information available.

Materials to Avoid (Incompatibility): No further relevant information available.

Hazardous Decomposition Products: No dangerous decomposition products known.

Hazardous Polymerization: ND

#### **Section 11: Toxicological Information**

Results of component toxicity test performed:

Acute toxicity: LD/LC50 values relevant for classification: 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.

Additional toxicological information:

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.

# **Section 12: Ecological Information**

Ecological Information:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

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 unneutralized.

Chemical Fate Information: ND

#### **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: None

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

#### **Section 14: Transportation Information**

<u>US DOT Information</u>: Proper shipping name: Sodium Hydroxide Solution

Hazard Class: 8 Packaging group: II UN Number: UN1824

IATA: Proper shipping name: Sodium Hydroxide Solution

Hazard Class: 8 Packing group: II UN Number: UN1824

Domestic shipments only: ND

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

Class: 8

UN Number: UN1824 Packing group: II Marine Pollutant: No

Canadian TDG: Proper shipping name: Sodium Hydroxide Solution

# **Section 15: Regulatory Information**

## **United States Federal Regulations**

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

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:

Chemicals known to cause cancer: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed

Chemicals known to cause developmental toxicity: None of the ingredients is 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

#### **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

#### Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

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