



*Safety Data Sheet*  
**Crystal Packaging, Inc.**

## DTC-2

### **1 PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier: DTC-2  
Synonyms: Sodium Hydroxide, Lye Solution  
Common Name: Sodium Hydroxide  
Product Code: 01220  
Revision Date: 1-15-2020  
Version: 2  
Chemical Family: Solvent  
Internal ID: F01220

Supplier Details: Crystal Packaging, Inc  
9155 Boston Street  
Henderson, CO 80640

Phone: 303-778-1805  
Email: accountant@crystalpackaging.com  
Emergency: Chemtrec---1-800-262-8200

### **2 HAZARDS IDENTIFICATION**

#### **Classification of the Substance or Mixture**

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Corrosive to Metals, 1  
Health, Acute toxicity, 3 Oral  
Health, Acute toxicity, 5 Oral  
Health, Acute toxicity, 5 Dermal  
Health, Acute toxicity, 5 Inhalation  
Health, Serious Eye Damage/Eye Irritation, 1  
Environmental, Hazards to the aquatic environment - Chronic, 3

#### **GHS Label Elements, Including Precautionary Statements**

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H290 - May be corrosive to metals  
H301 - Toxic if swallowed  
H303 - May be harmful if swallowed  
H313 - May be harmful in contact with skin  
H333 - May be harmful if inhaled  
H318 - Causes serious eye damage  
H412 - Harmful to aquatic life with long lasting effects

GHS Precautionary Statements:

P102 - Keep out of reach of children.  
P103 - Read label before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P223 - Do not allow contact with water.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P262 - Do not get in eyes, on skin, or on clothing.  
P264 - Wash ... thoroughly after handling.  
P281 - Use personal protective equipment as required.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
P304 + P312 - IF INHALED: Call a POISON CENTER/doctor/...if you feel unwell.

## Hazards not Otherwise Classified (HNOC) or not Covered by GHS

Route of Entry: Eyes; Ingestion; Inhalation; Skin

Inhalation: Harmful if inhaled. Causes burns. Corrosive to the respiratory system

Skin Contact: Severely corrosive to the skin. Causes severe burns.

Eye Contact: Severely corrosive to the eyes. Causes severe burns. Direct contact with the eyes can cause irreversible damage, including blindness.

Ingestion: Harmful or fatal if swallowed. May cause burns to mouth, throat, and stomach.

## 3 COMPOSITION/INFORMATION OF INGREDIENTS

| Chemical Ingredients: |        |  |
|-----------------------|--------|--|
| CAS#                  | %      | Chemical Name:                         |
| 1310-73-2             | 75-80% | Sodium hydroxide, solid                |
| 497-19-8              | 8-9%   | Carbonic acid disodium salt            |
| 34590-94-8            | <1%    | Dipropylene glycol methyl ether        |
| 7758-29-4             | <1%    | Triphosphoric acid, pentasodium salt   |
| 527-07-1              | <1%    | D-Gluconic acid, monosodium salt       |
| 9003-11-6             | <1%    | Oxirane, methyl-, polymer with oxirane |

## 4 FIRST AID MEASURES

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Call Poison Control immediately and keep SDS with victim.

Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Seek medical advise if symptoms do not subside.

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Ingestion: If swallowed, seek medical advice immediately/ Call Posion Control and show the container or label. Keep person warm and at rest. Do not induce vomiting.

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person

## 5 FIRE FIGHTING MEASURES

Flammability: Not immediately flammable

Attacks many metals producing extremely flammable hydrogen gas which can form explosive mistures with air.

Use an extinguisher agent suitable for the surrunding fire.

## 6 ACCIDENTAL RELEASE MEASURES

### Personal Procautions:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation.

Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

### Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Move containers from spill area. ApproachAvoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Large Spill:

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal

#### Small Spill:

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal

contractorMove containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## 7

### HANDLING AND STORAGE

#### Handling Precautions:

##### Handling:

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Do not breathe dust or mists from solutions. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Add this product only to water. Never add water to this product. Do not add to warm or hot water, a violent eruption or explosive reaction can result. May cause fire or explosion. Avoid contact with organic materials. Take any precaution to avoid mixing with strong acids. When making solutions or diluting, only add caustic soda slowly to surface of cold water while stirring. Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Caustic soda may react with various sugars to generate carbon monoxide. Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed vessels and can cause death. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Storage Requirements:

##### Storage:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not enter a storage tank or container (truck or rail) that has contained this product, even if it appears empty.

## 8

### EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering Controls:

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits

#### Personal Protective Equipment:

Chemical splash goggles and face shield.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Impervious gloves. nitrile, neoprene

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Exposure Limits: Sodium Hydroxide

**USA OSHA (TWA<sub>5</sub>)/PEL): 2 mg/m<sup>3</sup>**

**ACGIH (TWA/TLV): 2 mg/m<sup>3</sup>**

**Respiratory Protection: Essential if conditions exceed PEL's.**

**Ventilation: Local exhaust**

**Protective Gloves: Imoervious gloves; nitrile, neoprene**

**Eye Protection: Chemical splash googles, glasses****Other Protective Equipment:****9****PHYSICAL AND CHEMICAL PROPERTIES**

|                        |                   |
|------------------------|-------------------|
| Appearance:            | White Powder      |
| Physical State:        | Solid--granules   |
| Odor:                  | Odorless          |
| Odor Threshold:        | No data available |
| Solubility:            | Not known.        |
| Spec Grav./Density:    | 1.752             |
| Viscosity:             | No data available |
| Boiling Point:         | No data available |
| Freezing/Melting Pt.:  | No data available |
| Flash Point:           | No data available |
| Partition Coefficient: | No data available |
| Vapor Pressure:        | No data available |
| Vapor Density:         | No data available |
| pH:                    | Strongly Basic    |
| Evap. Rate:            | No data available |
| Auto-Ignition Temp:    | No data available |
| Decomp Temp:           | No data available |
| UFL/LFL:               | No data available |

**10****STABILITY AND REACTIVITY**

|                           |   |
|---------------------------|---|
| Chemical Stability:       | Product is stable under normal conditions.  |
| Conditions to Avoid:      | Avoid increased storage temperature. Pressure hazard.   |
| Materials to Avoid:       | Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids. Reactive or incompatible with the following materials: metals (Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.), acids, organic materials (May cause fire or explosion.), food sugars (Caustic soda may react with various sugars to generate carbon monoxide.), water ( Aqueous reaction with caustic soda can generate heat (strongly exothermic).) |
| Hazardous Decomposition:  | Not known.  |
| Hazardous Polymerization: | Will not occur.   |

**11****TOXICOLOGICAL INFORMATION****Toxicity Data: Sodium Hydroxide**

**Eye Effects:** Severely corrosive to the eyes. Causes severe burns. Direct contact with the eyes can cause irreversible damage, including blindness. Severely corrosive to the eyes. Causes severe burns. Direct contact with the eyes can cause irreversible damage, including blindness.

|                                   |  |
|-----------------------------------|--|
| <b>Skin Effects:</b>              | Severely corrosive to the skin. Causes severe burns. |
| <b>Ingestion Effects:</b>         | Severely corrosive to the mouth, throat and stomach. |
| <b>Accute Inhalation Effects:</b> | Corrosive to the respiratory system                  |
| <b>Chronic Effects:</b>           | Not Known.   |
| <b>Carcinogenicity:</b>           | Not Known.   |
| <b>Mutagenicity:</b>              | Not Known.   |
| <b>Teratogenicity:</b>            | Not Known.   |

**12****ECOLOGICAL INFORMATION**

Elimination (persistency and degradability): Not known

Harmful to aquatic life.

**13****DISPOSAL CONSIDERATIONS**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**14****TRANSPORT INFORMATION**

UN1823, Sodium hydroxide, solid, 8, PGII, (Sodium Hydroxide)

Packing Group: II

Reportable Quantity: 1000 lbs. (454 kg)

**15****REGULATORY INFORMATION**

[%] RQ (CAS#) Substance - Reg Codes

[73-78%] RQ(1000LBS), Sodium hydroxide, solid (1310-73-2) CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

[10-13%] Carbonic acid disodium salt (497-19-8) TSCA

[<1%] Dipropylene glycol methyl ether (34590-94-8) MASS, OSHAWAC, PA, TSCA, TXAIR

[<1%] Triphosphoric acid, pentasodium salt (7758-29-4) TSCA

[<1%] D-Gluconic acid, monosodium salt (527-07-1) TSCA

[<1%] Oxirane, methyl-, polymer with oxirane (9003-11-6) TSCA

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

RQ = Reportable Quantity

CERCLA = Superfund clean up substance

CSWHS = Clean Water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

OSHAWAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

TXAIR = TX Air Contaminants with Health Effects Screening Level

**16****OTHER INFORMATION**

NFPA: Health = 3, Fire = 1, Reactivity = 1, Specific Hazard = n/a  
HMIS III: Health = 3, Fire = 0, Physical Hazard = 1



**Disclaimer:**

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