1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name     Daley Big Man

Other means of identification
Product Code 889
UN/ID No UN3266
Document 889CGH5/889CGH15

Recommended use of the chemical and restrictions on use
Recommended use Built Laundry Detergent

Emergency telephone number
24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
                                      1-703-527-3887 (INTERNATIONAL)
Company Phone Number 773-284-6565

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation Category 1 Sub-category A
Serious eye damage/eye irritation Category 1

Label elements

Emergency Overview

Danger

Hazard Statements
Causes severe skin burns and eye damage

Appearance Transparent  Physical state Liquid  Odor None

Precautionary Statements - Prevention
• Do not breathe dust/fume/gas/mist/vapors/spray
• Wash face, hands and any exposed skin thoroughly after handling
• Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response
• 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

• IF ON SKIN (or hair): Remove/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

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information
Unknown Acute Toxicity 7.5075% of the mixture consists of ingredient(s) of unknown toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>15% - 20%</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice
Show this safety data sheet to the doctor in attendance.

Eye contact
Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. GET IMMEDIATE MEDICAL ATTENTION.

Skin contact
Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.

Inhalation
If qualified give oxygen or artificial respiration as needed. If symptoms persist, call a physician.

Ingestion
DO NOT induce vomiting. Give large amounts of water if victim is conscious. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of First-aiders
Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Main Symptoms
The most important known symptoms and effects are described in the labelling in section 2.
and/or in section 11.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** Probable mucosal damage may contraindicate the use of gastric lavage.

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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
Prolonged contact of solutions of this product with aluminum and other soft metals may release flammable hydrogen gas.

**Explosion Data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**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.

---

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid breathing in spray mist or vapors.

**Other information**
Common Weak Acids suitable for neutralizing caustic alkalis: acetic acid, citric acid, lemon juice, tartaric acid, vinegar.

**Environmental precautions**
Keep out of waterways. Neutralization is normally necessary before waste water is discharged into water treatment plants. See Section 12 for additional Ecological Information.

**Methods and materials for containment and cleaning up**

**Methods for Containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Contain spill. Neutralize with mild acid. Flush with large quantities of water. If necessary, vacuum up or soak up with inert absorbent and place in suitable container(s) for disposal.

---

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
KEEP OUT OF REACH OF CHILDREN. Do not eat, drink or smoke when using this product. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Ensure adequate ventilation.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions**
Keep container in cool well ventilated area. Store away from incompatible materials. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines  Review Section 3 & 4 for Exposure Guidelines.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td></td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td>Ceiling: 2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures  Ensure adequate ventilation and that running water is available for washing eyes and skin
Individual protection measures, such as personal protective equipment

Eye/Face Protection  Splash-proof chemical goggles or face shield.
Skin and body protection  Impervious rubber, alkali-proof protective gloves. Impervious rubber boots & apron.
Respiratory protection  If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures  Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Transparent</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Purple</td>
<td>Odor None</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>14.0 +/- 0.5</td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/bubbling range</td>
<td>&gt; 100 °C / &gt; 212 °F</td>
<td>Estimated</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>About the same as water</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>NE</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.198 +/- 0.005</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Completely soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Other information
10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials

Hazardous Decomposition Products
Hydrogen gas by reaction with incompatible metals.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Causes severe skin burns and eye damage

Inhalation
Inhalation may cause severe respiratory irritation and pulmonary edema.

Eye contact
Corrosive to the eyes and may cause severe damage including blindness.

Skin contact
Contact causes severe skin irritation and possible burns.

Ingestion
Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea, and shock.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>140 mg/kg (Rat)</td>
<td>= 1350 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
No information available.

Mutagenic effects
No information available.

Carcinogenicity
Contains no ingredient listed as a carcinogen.

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Chronic toxicity
No known effect based on information supplied.

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
7.5075% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

Dermal LD50
7,714.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
8.4075% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>-</td>
<td>45.4, 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>-</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

**Other adverse effects**
No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment**

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

**Contaminated packaging**
Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Toxic Corrosive</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**
Regulated

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN3266</td>
<td>Corrosive Liquid, Basic, Inorganic, n.o.s. (Sodium Hydroxide)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>Packing Group</th>
<th>Emergency Response Guide Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>II</td>
<td>154</td>
</tr>
</tbody>
</table>

### 15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies</td>
<td>Complies</td>
<td>-</td>
<td>Complies</td>
<td>Complies</td>
<td>Complies</td>
<td>Complies</td>
<td>Complies</td>
</tr>
</tbody>
</table>
Legend:
TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: Yes

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>1000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>1000 lb</td>
<td>-</td>
<td>RQ 1000 lb final RQ RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>COR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazard</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By
Daley International
4100 West 76th Street
Chicago, IL 60652

Issuing date
14-Aug-2012

Revision Date
08-Sep-2015

Revision Note
3
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of Safety Data Sheet