

HD-325

## Section 1. Chemical product and company identification

**Product name** : HD-325  
**Recommended use and restrictions** : Cleaning product  
 Use only for the purpose on the product label.

**Product dilution information** : Up to 1 oz/3 gal or 2.6 g/L in water



**Supplier's information** : Ecolab Inc. Food & Beverage Division  
 370 N. Wabasha Street  
 St. Paul, MN 55102  
 1-800-392-3392

**Code** : 922281-10

**Date of issue** : **02 Jan 2014**

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
 Outside United States and Canada CALL 1-651-222-5352 (in USA)

## Section 2. Hazards identification

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>GHS Classification</b>	: SKIN CORROSION/IRRITATION - Category 1A SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
<b>GHS label elements</b>		
<b>Signal word</b>	: Danger	Danger
<b>Symbol</b>	: 	
<b>Hazard statements</b>	: Causes severe skin burns and eye damage.	Causes severe skin burns and eye damage.
<b>Precautionary statements</b>		
<b>Prevention</b>	: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe dust or mist. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.	Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.
<b>Response</b>	: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

## Section 2. Hazards identification

	do. Continue rinsing. Immediately call a POISON CENTER or physician.	lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
<b>Storage</b>	: No other specific measures identified.	No other specific measures identified.
<b>Disposal</b>	: See section 13 for waste disposal information.	See section 13 for waste disposal information.
<b>Other hazards</b>	: Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.	None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Product AS SOLD**

Hazardous ingredients	Concentration Range (%)	CAS number
PENTASODIUM TRIPHOSPHATE	25	7758-29-4
SODIUM HYDROXIDE	20	1310-73-2
SODIUM CARBONATE	20 - 50	497-19-8
SODIUM CHLORIDE	5 - 20	7647-14-5
SODIUM METASILICATE	5 - 20	6834-92-0
troclosene sodium, dihydrate	1 - 5	51580-86-0
oxirane, methyl-, polymer with oxirane	1 - 5	9003-11-6

**Product AT USE DILUTION**

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## Section 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
<b>Eye contact</b>	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
<b>Skin contact</b>	: Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Inhalation</b>	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
<b>Ingestion</b>	: Get medical attention immediately. Rinse mouth. Do not induce vomiting.	Get medical attention immediately. Rinse mouth. Do not induce vomiting.
<b>Protection of first-aiders</b>	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If ventilation is inadequate, use respirator that will protect against dust/mist. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	
<b>Notes to physician</b>	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
<b>See toxicological information (section 11)</b>		

## Section 5. Fire-fighting measures

<b>Product AS SOLD</b>	
<b>Suitable fire extinguishing media</b>	: Use dry chemical powder.
<b>Specific hazards arising from the chemical</b>	: No specific fire or explosion hazard.
<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds metal oxide/oxides
<b>Specific fire-fighting methods</b>	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Personal precautions</b>	: Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.	Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.
<b>Environmental precautions</b>	: Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of spilled material and runoff with soil and surface waterways.
<b>Methods for cleaning up</b>	: If emergency personnel are not present, contain and collect small spillages with non-combustible absorbent material, e.g. sand, earth or other suitable material and place in a suitable container for disposal. Use a water rinse for final clean-up.	Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.

## Section 7. Handling and storage

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Handling</b>	: Do not get in eyes or on skin or clothing. Do not breathe dust. Use only with adequate ventilation. Wash thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.	Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	: Keep out of reach of children. Keep container tightly closed.  Store between the following temperatures: -30 and 40°C	Keep out of reach of children. Keep container tightly closed.

## Section 8. Exposure controls/personal protection

Control parameters	
Ingredient name	Exposure limits
<p>SODIUM HYDROXIDE</p> <p>chlorine</p>	<p><b>ACGIH TLV (United States, 3/2012).</b> C: 2 mg/m<sup>3</sup></p> <p><b>OSHA PEL (United States, 6/2010).</b> TWA: 2 mg/m<sup>3</sup> 8 hours.</p> <p><b>NIOSH REL (United States, 6/2009).</b> CEIL: 2 mg/m<sup>3</sup></p> <p><b>ACGIH TLV (United States, 3/2012).</b> STEL: 2.9 mg/m<sup>3</sup> 15 minutes. STEL: 1 ppm 15 minutes. TWA: 1.5 mg/m<sup>3</sup> 8 hours. TWA: 0.5 ppm 8 hours.</p> <p><b>OSHA PEL (United States, 6/2010).</b> CEIL: 3 mg/m<sup>3</sup> CEIL: 1 ppm</p> <p><b>NIOSH REL (United States, 6/2009).</b> CEIL: 0.5 ppm 15 minutes. CEIL: 1.45 mg/m<sup>3</sup> 15 minutes.</p>

<p><b>Appropriate engineering controls</b></p>	<p><b>Product AS SOLD</b></p> <p>: Use only with adequate ventilation. 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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.</p>
<p><b>Personal protection</b></p> <p><b>Eye protection</b></p> <p><b>Hand protection</b></p> <p><b>Skin protection</b></p> <p><b>Respiratory protection</b></p> <p><b>Hygiene measures</b></p>	<p><b>Product AT USE DILUTION</b></p> <p>Use only with adequate ventilation. 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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.</p> <p>Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.</p> <p>Use chemical-resistant, impervious gloves.</p> <p>Use synthetic apron, other protective equipment as necessary to prevent skin contact.</p> <p>A respirator is not needed under normal and intended conditions of product use.</p>
<p>: Use only with adequate ventilation. 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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.</p> <p>: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.</p> <p>: Use chemical-resistant, impervious gloves.</p> <p>: Use synthetic apron, other protective equipment as necessary to prevent skin contact.</p> <p>: A respirator is not needed under normal and intended conditions of product use.</p> <p>: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.</p>	<p>Use only with adequate ventilation. 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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.</p> <p>Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.</p> <p>Use chemical-resistant, impervious gloves.</p> <p>Use synthetic apron, other protective equipment as necessary to prevent skin contact.</p> <p>A respirator is not needed under normal and intended conditions of product use.</p>

## Section 9. Physical and chemical properties

<p><b>Physical state</b></p> <p><b>Color</b></p> <p><b>Odor</b></p> <p><b>pH</b></p> <p><b>Flash point</b></p> <p><b>Explosion limits</b></p>	<p><b>Product AS SOLD</b></p> <p>: Powder</p> <p>: Tan [Light]</p> <p>: chlorine</p> <p>: 13 (1%)</p> <p>: &gt; 100°C</p> <p>: Not available.</p>
<p><b>Physical state</b></p> <p><b>Color</b></p> <p><b>Odor</b></p> <p><b>pH</b></p> <p><b>Flash point</b></p> <p><b>Explosion limits</b></p>	<p><b>Product AT USE DILUTION</b></p> <p>Liquid.</p> <p>Pale color</p> <p>Faint odor</p> <p>12.5 to 13.4</p> <p>&gt; 100°C</p>

## Section 9. Physical and chemical properties

<b>Flammability (solid, gas)</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: Not available.
<b>Evaporation rate (butyl acetate = 1)</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: Only known value: 2.12 (Water = 1) (sodium hydroxide).
<b>Solubility</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Odor threshold</b>	: Not available.
<b>Viscosity</b>	: Kinematic (room temperature): 0 cm <sup>2</sup> /s (0 cSt)

## Section 10. Stability and reactivity

### Product AS SOLD

<b>Stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Materials to avoid</b>	: Extremely reactive or incompatible with the following materials: acids. Highly reactive or incompatible with the following materials: moisture. Slightly reactive or incompatible with the following materials: metals. Do not allow water to enter container. Wet material may generate halogenated gas that may pressurize sealed containers. Mixing this product with acid or ammonia releases chlorine gas.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

**Route of exposure** : Skin contact, Eye contact, Ingestion

### Product AS SOLD

#### Symptoms

<b>Eye contact</b>	: Adverse symptoms may include the following: pain watering redness
<b>Skin contact</b>	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
<b>Inhalation</b>	: Adverse symptoms may include the following: respiratory tract irritation coughing Respiratory tract irritation

### Product AT USE DILUTION

Adverse symptoms may include the following:  
pain  
watering  
redness

Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur

Adverse symptoms may include the following:  
coughing  
Respiratory tract irritation

## Section 11. Toxicological information

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

**Acute toxicity**

**Eye contact** : Causes serious eye damage.

**Skin contact** : Causes severe burns.

**Inhalation** : May cause respiratory irritation.

**Ingestion** : May cause burns to mouth, throat and stomach.

Adverse symptoms may include the following:  
stomach pains

Causes serious eye damage.

Causes severe burns.

May cause respiratory irritation.

May cause burns to mouth, throat and stomach.

### Toxicity data

#### Product/ingredient name

sodium carbonate	LC50 Inhalation Dusts and mists	Rat	1.15 mg/l
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	2800 mg/kg
triphosphoric acid, pentasodium salt	LD50 Dermal	Rabbit	>4650 mg/kg
	LD50 Oral	Rat	3050 mg/kg
sodium chloride	LC50 Inhalation Dusts and mists	Rat	>10.5 mg/l
	LD50 Dermal	Rabbit	>10000 mg/kg
	LD50 Oral	Rat	3000 mg/kg
disodium metasilicate	LD50 Oral	Rat	500 mg/kg
troclosene sodium, dihydrate	LD50 Dermal	Rat	>5000 mg/kg
	LD50 Oral	Rat	1823 mg/kg
oxirane, methyl-, polymer with oxirane	LC50 Inhalation Dusts and mists	Rat	0.147 mg/l
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	>2000 mg/kg

### Chronic toxicity

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Product AS SOLD

**Ecotoxicity** : This material is toxic to aquatic life.

### Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
sodium carbonate	Acute EC50 200 mg/l	Daphnia	48 hours
triphosphoric acid, pentasodium salt	Acute EC50 >100 mg/l	Daphnia	48 hours
sodium hydroxide	Acute EC50 40 mg/l	Daphnia	48 hours
sodium chloride	Acute LC50 5840 mg/l	Fish	96 hours
disodium metasilicate	Acute LC50 210 mg/l	Fish	96 hours
troclosene sodium, dihydrate	Acute EC50 0.196 mg/l	Daphnia	48 hours
oxirane, methyl-, polymer with oxirane	Acute LC50 >100 mg/l	Fish	96 hours

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Product AS SOLD**  
**Disposal methods** : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Product AT USE DILUTION**  
 Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

**DOT**

**DOT Classification** UN3262  
**DOT Proper shipping name** Corrosive solid, basic, inorganic, n.o.s. (Contains sodium hydroxide)  
**Class** 8  
**Packing group** III

**IMO/IMDG**

**IMO/IMDG Classification** UN3262  
**IMO/IMDG Proper shipping name** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide). Marine pollutant (troclosene sodium, dihydrate)  
**Class** 8  
**Packing group** III

For transport in bulk, see shipping documents for specific transportation information.

**Product AT USE DILUTION**  
 Not intended for transport.

## Section 15. Regulatory information

**Product AS SOLD**

**U.S. Federal regulations**

**TSCA 8(b) inventory** : All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances:** No listed substance  
**SARA 302/304 emergency planning and notification:** No listed substance

<u>SARA 313</u>	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: No listed substance		

**California Prop. 65** : No listed substance

## Section 16. Other information

# Section 16. Other information

Product AS SOLD

Hazardous Material Information System (U.S.A.) :

Health	*	3
Flammability		0
Physical hazards		0

National Fire Protection Association (U.S.A.) :



Date of issue : 02 Jan 2014  
 Prepared by : Regulatory Affairs  
 1-800-352-5326

**Notice to reader**

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**

Product AT USE DILUTION

Health		3
Flammability		0
Physical hazards		0

