

## SOLID SURGE PLUS

### Section 1. Chemical product and company identification

**Product name** : SOLID SURGE PLUS  
**Recommended use and restrictions** : Laundry detergent  
 Use only for the purpose on the product label.

**Product dilution information** : Up to 1.5 oz/10 gal or 1.1 mL/L in water

**Supplier's information** : Ecolab Inc. Institutional Division  
 370 N. Wabasha Street  
 St. Paul, MN 55102  
 1-800-352-5326

**Code** : 905323-01

**Date of issue** : **03 Apr 2013**  
 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>	: CORROSIVE TO METALS - Category 1 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>	: May be corrosive to metals. Causes severe skin burns and eye damage.	Causes severe skin burns and eye damage.
<b>Precautionary statements</b>		
<b>Prevention</b>	: Keep only in original container. Wash thoroughly after handling.	Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.
<b>Response</b>	: Absorb spillage to prevent material damage. 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 do. Continue	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 do. Continue

## Section 2. Hazards identification

	rinsing. Immediately call a POISON CENTER or physician.	rinsing. Immediately call a POISON CENTER or physician.
<b>Storage</b>	: Store in corrosive resistant container with a resistant inner liner.	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>	: None known.	None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

### Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
SODIUM HYDROXIDE	42	1310-73-2
alcohols, c12-16, ethoxylated	5 - 20	68551-12-2
SODIUM CARBONATE	5 - 20	497-19-8
SODIUM CITRATE	1 - 5	68-04-2

### 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.	
<b>Notes to physician</b>	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
<b>See toxicological information (section 11)</b>		

## Section 5. Fire-fighting measures

### Product AS SOLD

- Suitable fire extinguishing media** : Use water spray, fog or foam.
- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides
- Specific fire-fighting methods** : 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.
- Special protective equipment for fire-fighters** : 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

	Product AS SOLD	Product AT USE DILUTION
<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>	: Collect spillage. 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

	Product AS SOLD	Product AT USE DILUTION
<b>Handling</b>	: Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wash thoroughly after handling.	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: 0 and 50°C	Keep out of reach of children. Keep container tightly closed.

## Section 8. Exposure controls/personal protection

### Control parameters

Ingredient name	Exposure limits
SODIUM HYDROXIDE	<b>ACGIH TLV (United States, 3/2012).</b> C: 2 mg/m <sup>3</sup> <b>OSHA PEL (United States, 6/2010).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. <b>NIOSH REL (United States, 6/2009).</b> CEIL: 2 mg/m <sup>3</sup>

**Appropriate engineering controls** : **Product AS SOLD**  
 : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Product AT USE DILUTION

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.

### Personal protection

**Eye protection** : Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.

Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

**Hand protection** : Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.

Use chemical-resistant, impervious gloves.

**Skin protection** : Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.

Use synthetic apron, other protective equipment as necessary to prevent skin contact.

**Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.

A respirator is not needed under normal and intended conditions of product use.

**Hygiene measures** : 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.

## Section 9. Physical and chemical properties

**Physical state** : **Product AS SOLD**  
 : Cast Solid

**Color** : Yellow

**Odor** : Fragrance-like

**pH** : 11.8 to 13 (1%)

**Flash point** : > 100°C  
 Product does not support combustion.

**Explosion limits** : Not available.

**Flammability (solid, gas)** : Not available.

**Melting point** : Not available.

**Boiling point** : >100°C (>212°F)

**Evaporation rate (butyl acetate = 1)** : Not available.

**Vapor pressure** : Not available.

### Product AT USE DILUTION

Liquid.  
 Colorless  
 Fragrance-like  
 10.8 to 12.2  
 > 100°C

## Section 9. Physical and chemical properties

Vapor density	: Not available.
Relative density	: 1.45 to 1.55 (Water = 1)
Solubility	: Easily soluble in the following materials: hot water. Soluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Odor threshold	: Not available.
Viscosity	: Not available.

## Section 10. Stability and reactivity

### Product AS SOLD

Stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: Highly reactive or incompatible with the following materials: acids. Reactive or incompatible with the following materials: metals. Slightly reactive or incompatible with the following materials: moisture.
Hazardous decomposition products	: 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

Eye contact	: Adverse symptoms may include the following: pain watering redness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Inhalation	: Adverse symptoms may include the following: coughing Respiratory tract irritation
Ingestion	: Adverse symptoms may include the following: stomach pains
<b>Acute toxicity</b>	
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.

### 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

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

## Section 11. Toxicological information

alcohols, c12-16, ethoxylated	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	1100 mg/kg
sodium carbonate	LC50 Inhalation	Rat	1.15 mg/l
	Dusts and mists		
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	2800 mg/kg

### Chronic toxicity

<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: 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 hydroxide	Acute EC50 40 mg/l	Daphnia	48 hours
alcohols, c12-16, ethoxylated	Acute LC50 1.5 mg/l	Fish	96 hours
sodium carbonate	Acute EC50 200 mg/l	Daphnia	48 hours

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

## Section 13. Disposal considerations

**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	UN1823
DOT Proper shipping name	Sodium hydroxide, solid mixture
Class	8
Packing group	II

### IMO/IMDG

IMO/IMDG Classification	UN1823
IMO/IMDG Proper shipping name	SODIUM HYDROXIDE, SOLID mixture
Class	8
Packing group	II

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

## Section 14. Transport 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

**SARA 313** Product name CAS number Concentration

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

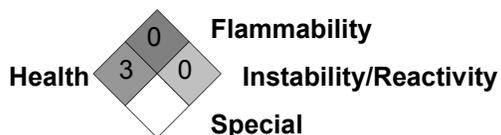
## Section 16. Other information

**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 : 03 Apr 2013  
 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

