

SAFETY DATA SHEET



KLENZ SOLV

Section 1. Chemical product and company identification

Product name : KLENZ SOLV
Recommended use and restrictions : Cleaning product
Use only for the purpose on the product label.

Product dilution information : Up to 5 oz/gal or 40 mL/L in water

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

Code : 914895

Date of issue : 24 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

GHS Classification : **Product AS SOLD**
FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Signal word : Danger

Symbol :  

Hazard statements : Flammable liquid and vapor.
Causes severe skin burns and eye damage.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Keep container tightly closed. Wash hands thoroughly after handling.

Response : 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.

Product AT USE DILUTION
SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Danger



Causes severe skin burns and eye damage.

Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.

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

Section 2. Hazards identification

	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.	water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store in a well-ventilated place. Keep cool.	No other specific measures identified.
Disposal	: See section 13 for waste disposal information.	See section 13 for waste disposal information.
Other hazards	: None known.	None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
SODIUM DODECYLBENZENESULFONATE	3	25155-30-0
SODIUM HYDROXIDE	3	1310-73-2
METHOXYISOPROPANOL	5 - 20	107-98-2
SODIUM XYLENE SULFONATE	1 - 5	1300-72-7
TETRASODIUM EDTA	1 - 5	64-02-8

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
Eye contact	: 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.
Skin contact	: 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.
Inhalation	: 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.
Ingestion	: Get medical attention immediately. Rinse mouth. Do not induce vomiting.	Get medical attention immediately. Rinse mouth. Do not induce vomiting.
Protection of first-aiders	: 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.	
Notes to physician	: 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.	
See toxicological information (section 11)		

Section 5. Fire-fighting measures

Product AS SOLD

- Suitable fire extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Specific hazards arising from the chemical** : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 sulfur oxides
 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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

- Personal precautions** : Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Eliminate all ignition sources. Use personal protective equipment as required. Do not touch or walk through spilled material.
- Environmental precautions** : Avoid contact of spilled material and runoff with soil and surface waterways.
- Methods for cleaning 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. 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 tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Use a water rinse for final clean-up.

Product AT USE DILUTION

- 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.
- Avoid contact of spilled material and runoff with soil and surface waterways.
- 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

- Handling** : Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Use only with adequate ventilation. Wash thoroughly after handling.
- Storage** :

Product AT USE DILUTION

- 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.

Section 7. Handling and storage

Keep out of reach of children. Keep container tightly closed. Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame). Store in a segregated and approved area.

Store between the following temperatures: -10 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
METHOXYISOPROPANOL	<p>ACGIH TLV (United States, 3/2012). STEL: 553 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 369 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). TWA: 100 ppm 10 hours. TWA: 360 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 540 mg/m³ 15 minutes.</p>
SODIUM HYDROXIDE	<p>ACGIH TLV (United States, 3/2012). C: 2 mg/m³</p> <p>OSHA PEL (United States, 6/2010). TWA: 2 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 6/2009). CEIL: 2 mg/m³</p>

Appropriate engineering controls

Product AS SOLD

: 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

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

Hand protection : Use chemical-resistant, impervious gloves.

Skin protection : 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.

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.

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

Use chemical-resistant, impervious gloves.

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

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

Section 9. Physical and chemical properties

	Product AS SOLD
Physical state	: Liquid.
Color	: Yellow [Light]
Odor	: Faint odor
pH	: 12.1 (100%)
Flash point	: 51 °C (Closed cup)
Explosion limits	: Not available.
Flammability (solid, gas)	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Evaporation rate (butyl acetate = 1)	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.058 (Water = 1)
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Odor threshold	: Not available.
Viscosity	: Kinematic (room temperature): 0 cm ² /s (0 cSt)

Product AT USE DILUTION
Liquid.
Colorless
Odorless
11.5 to 12.5 [Conc. (% w/w): 100%]
> 100°C

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	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid	: Highly reactive or incompatible with the following materials: acids. Slightly reactive or incompatible with the following materials: metals and 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, Inhalation, Ingestion

Section 11. Toxicological information

	Product AS SOLD	Product AT USE DILUTION
Symptoms		
Eye contact	: Adverse symptoms may include the following: pain watering redness	Adverse symptoms may include the following: pain watering redness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Inhalation	: Adverse symptoms may include the following: coughing Respiratory tract irritation	Adverse symptoms may include the following: coughing Respiratory tract irritation
Ingestion	: Adverse symptoms may include the following: stomach pains	Adverse symptoms may include the following: stomach pains
Acute toxicity		
Eye contact	: Causes serious eye damage.	Causes serious eye damage.
Skin contact	: Causes severe burns.	Causes severe burns.
Inhalation	: May cause respiratory irritation.	May cause respiratory irritation.
Ingestion	: May cause burns to mouth, throat and stomach.	May cause burns to mouth, throat and stomach.

Toxicity data

Product/ingredient name

1-methoxy-2-propanol	LC50 Inhalation Vapor	Rat	27.3 mg/l
	LD50 Dermal	Rabbit	>13000 mg/kg
	LD50 Oral	Rat	>5000 mg/kg
sodium dodecylbenzene sulfonate	LD50 Dermal	Rat	>2000 mg/kg
	LD50 Oral	Rat	1086 mg/kg
Benzenesulfonic acid, dimethyl-, sodium salt (1:1)	LC50 Inhalation Dusts and mists	Rat	>6.2 mg/l
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	>7000 mg/kg
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	LD50 Oral	Rat	1700 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 : No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
-------------------------	--------	---------	----------

Section 12. Ecological information

1-methoxy-2-propanol	Acute LC50 >1000 mg/l	Fish	96 hours
sodium dodecylbenzene sulfonate	Acute LC50 3.2 mg/l	Fish	96 hours
sodium hydroxide	Acute EC50 40 mg/l	Daphnia	48 hours
Benzenesulfonic acid, dimethyl-, sodium salt (1:1)	Acute EC50 230 mg/l	Aquatic plants	96 hours
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	Acute LC50 121 mg/l	Fish	96 hours

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

Section 13. Disposal considerations

Disposal methods : **Product AS SOLD**
 : 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.

RCRA classification : Unused product is D001 (Ignitable)

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 : UN2920
DOT Proper shipping name : Corrosive liquids, flammable, n.o.s. (sodium hydroxide, 1-methoxy-2-propanol)
Class : 8 (3)
Packing group : II

IMO/IMDG

IMO/IMDG Classification : UN2920
IMO/IMDG Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S. (sodium hydroxide, 1-methoxy-2-propanol)
Class : 8 (3)
Packing group : II

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

Product AS SOLD

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

Health	*	3
Flammability		2
Physical hazards		0

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



Product AT USE DILUTION

Health		3
Flammability		0
Physical hazards		0



Date of issue : 24 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.