

KOOL KLENE

Section 1. Chemical product and company identification

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

Product dilution information : Not applicable

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

Code : 965806-03

Date of issue : **25 Jul 2013**
 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
 SERIOUS EYE DAMAGE/ EYE IRRITATION -
 Category 2B

GHS label elements

Signal word : Warning

Symbol :

Hazard statements : Flammable liquid and vapor.
 Causes eye irritation.

Precautionary statements

Prevention : Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Keep container tightly closed. Wash hands thoroughly after handling.

Response : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store in a well-ventilated place. Keep cool.

Disposal : See section 13 for waste disposal information.

Other hazards : None known.

Product AT USE DILUTION

Product is sold ready to use.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product AS SOLD

Hazardous ingredients	Concentration Range (%)	CAS number
GLYCERIN	20 - 50	56-81-5
ISOPROPYL ALCOHOL	5 - 20	67-63-0
ETHANOLAMINE	1 - 5	141-43-5
poly(oxy-1,2-ethanediyl), .alpha.-undecyl-.omega.-hydroxy-	1 - 5	34398-01-1

Product AT USE DILUTION		
Hazardous ingredients	Concentration Range (%)	CAS number
Product is sold ready to use.		

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 if irritation persists.	Product is sold ready to use.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	
Inhalation	: No special measures required. Treat symptomatically.	
Ingestion	: Get medical attention if symptoms occur.	
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.	
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, CO ₂ , 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
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 : Eliminate all ignition sources. Use personal protective equipment as required. Do not touch or walk through spilled material.

Environmental precautions : Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.

Methods for cleaning up : 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.

Product AT USE DILUTION

Product is sold ready to use.

Section 7. Handling and storage

Product AS SOLD

Handling : Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Use only with adequate ventilation. Wash thoroughly after handling.

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: 0 and 35°C

Product AT USE DILUTION

Product is sold ready to use.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
GLYCERIN	<p>OSHA PEL (United States, 6/2010). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</p> <p>TWA: 15 mg/m³ 8 hours. Form: Total dust</p>
ISOPROPYL ALCOHOL	<p>ACGIH TLV (United States, 3/2012). TWA: 10 mg/m³ 8 hours.</p> <p>ACGIH TLV (United States, 3/2012). STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.</p> <p>OSHA PEL (United States, 6/2010). TWA: 980 mg/m³ 8 hours. TWA: 400 ppm 8 hours.</p> <p>NIOSH REL (United States, 6/2009). TWA: 400 ppm 10 hours. TWA: 980 mg/m³ 10 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m³ 15 minutes.</p>
ETHANOLAMINE	<p>ACGIH TLV (United States, 3/2012). STEL: 15 mg/m³ 15 minutes. STEL: 6 ppm 15 minutes. TWA: 7.5 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p>

Section 8. Exposure controls/personal protection

OSHA PEL (United States, 6/2010).
 TWA: 6 mg/m³ 8 hours.
 TWA: 3 ppm 8 hours.
NIOSH REL (United States, 6/2009).
 TWA: 3 ppm 10 hours.
 TWA: 8 mg/m³ 10 hours.
 STEL: 6 ppm 15 minutes.
 STEL: 15 mg/m³ 15 minutes.

Product AS SOLD

Appropriate engineering controls : 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.

Personal protection

Eye protection : No protective equipment is needed under normal use conditions.

Hand protection : No protective equipment is needed under normal use conditions.

Skin protection : No protective equipment is needed under normal use conditions.

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.

Product AT USE DILUTION

Product is sold ready to use.

Section 9. Physical and chemical properties

Product AS SOLD

Physical state : Liquid.

Color : Green [Light]

Odor : Alcohol-like

pH : 10.6 to 11.8 (100%)

Flash point : 41 °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 : 1.065 to 1.085 (Water = 1)

Solubility : Easily soluble in the following materials: cold water and hot water.

Product AT USE DILUTION

Product is sold ready to use.

Section 9. Physical and chemical properties

Partition coefficient: : Not available.
 n-octanol/water
 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 : 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 : Reactive or incompatible with the following materials: acids.
 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

Product AS SOLD

Symptoms

Eye contact : Adverse symptoms may include the following:
 irritation
 watering
 redness
 Skin contact : No specific data.
 Inhalation : No specific data.
 Ingestion : No specific data.

Acute toxicity

Eye contact : Causes eye irritation.
 Skin contact : No known significant effects or critical hazards.
 Inhalation : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Product AT USE DILUTION

Product is sold ready to use.

Toxicity data

Product/ingredient name

glycerin	LC50 Inhalation	Rat	>2.75 mg/l
	Dusts and mists		
propan-2-ol	LD50 Dermal	Rabbit	23000 mg/kg
	LD50 Oral	Rat	18300 mg/kg
	LC50 Inhalation Vapor	Rat	30 mg/l
2-aminoethanol	LD50 Dermal	Rabbit	12870 mg/kg
	LD50 Oral	Rat	4710 mg/kg
	LD50 Dermal	Rabbit	1025 mg/kg
poly(oxy-1,2-ethanediyl), .alpha.-undecyl-.omega.-hydroxy-	LD50 Oral	Rat	1089 mg/kg
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	1700 mg/kg

Section 11. Toxicological information

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
glycerin	Acute LC50 855 mg/l	Fish	96 hours
propan-2-ol	Acute LC50 9640 mg/l	Fish	96 hours
2-aminoethanol	Acute EC50 65 mg/l	Daphnia	48 hours
poly(oxy-1,2-ethanediyl), .alpha.-undecyl-. omega.-hydroxy-	Acute LC50 3.2 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.
- RCRA classification** : Unused product is D001 (Ignitable)

Product AT USE DILUTION
Product is sold ready to use.

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 : Not regulated.

IMO/IMDG

- IMO/IMDG Classification** : UN1993
- IMO/IMDG Proper shipping name** : FLAMMABLE LIQUID, N.O.S. (isopropanol)
- Class** : 3
- 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

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	*	1
Flammability		2
Physical hazards		0

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



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 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.