

KOOL KLENE

Section 1. Chemical product and company identification

Trade name : KOOL KLENE
 Product use : Cleaning product
 Supplier : Ecolab Inc. Institutional Division
 370 N. Wabasha Street
 St. Paul, MN 55102
 1-800-352-5326
 965806-03
 Date of issue : 01-December-2009

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
 Outside United States and Canada CALL 1-651-222-3352 (in USA)

Section 2. Hazards identification

Physical state : Liquid, [liquid]
 Emergency overview : CAUTION!

COMBUSTIBLE LIQUID AND VAPOR.
 MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
 Can cause central nervous system (CNS) depression.
 Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Moderately irritating to eyes.
 Skin : Moderately irritating to the skin.
 Inhalation : Moderately irritating to the respiratory system. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
 Ingestion : May be harmful if swallowed. Ingestion may cause nausea, weakness and central nervous system effects.

See toxicological information (section 11)

Section 3. Composition/information on ingredients

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

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation persists.
 Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing before reuse. Clean shoes thoroughly before reuse.
 Inhalation : If inhaled, remove to fresh air.
 Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire-fighting measures

Flash point : 40.5556 °C (Closed cup)
 Hazardous thermal decomposition products : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 Fire-fighting media and instructions : Use dry chemical, CO₂, water spray (fog) or foam.

Use water spray to keep fire-exposed containers cool. Dike area of fire to prevent runoff.

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

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

Personal precautions : Use suitable protective equipment (section 8). Do not allow to enter drains or watercourses.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills, acid absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

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

Storage : Keep out of reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above the following temperature: 35°C

Section 8. Exposure controls/personal protection

Engineering measures : 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:

Eyes : Eye protection recommended.
 Hands : For prolonged or repeated handling, use the following type of gloves: Impermeable gloves.
 Skin : No protective equipment is needed under normal use conditions.
 Respiratory : Avoid breathing vapors, spray or mists.
 Name : Exposure limits

GLYCERIN

ACGIH TLV (United States, 1/2009).
TWA: 10 mg/m³ 8 hour(s). Form: Mist
OSHA PEL (United States, 11/2006).
TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction
TWA: 15 mg/m³ 8 hour(s). Form: Total dust

ISOPROPYL ALCOHOL

ACGIH TLV (United States, 1/2009).
STEL: 400 ppm 15 minute(s)
TWA: 200 ppm 8 hour(s)
OSHA PEL (United States, 11/2006).
TWA: 980 mg/m³ 8 hour(s)
TWA: 400 ppm 8 hour(s)

ETHANOLAMINE

ACGIH TLV (United States, 1/2009).
STEL: 15 mg/m³ 15 minute(s)
STEL: 6 ppm 15 minute(s)
TWA: 7.5 mg/m³ 8 hour(s)
TWA: 3 ppm 8 hour(s)
OSHA PEL (United States, 11/2006).
TWA: 6 mg/m³ 8 hour(s)
TWA: 3 ppm 8 hour(s)

Section 9. Physical and chemical properties

Physical state : Liquid [Liquid]
Color : Green. [Light]
Odor : Alcohol-like.
pH : 10.6 to 11.8 [Conc. (% w/w): 100%]
Relative density : 1.065 to 1.085
Dispersibility properties : Easily dispersible in the following materials: cold water and hot water.
Solubility : Easily soluble in the following materials: cold water and hot water.

Section 10. Stability and reactivity

Stability : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Reactivity : 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.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Potential acute health effects
Eyes : Moderately irritating to eyes.
Skin : Moderately irritating to the skin.
Inhalation : Moderately irritating to the respiratory system. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.
Ingestion : May be harmful if swallowed. Ingestion may cause nausea, weakness and central nervous system effects.
Potential chronic health effects
Other adverse effects : Contains material which causes damage to the following organs: kidneys, liver.
Target organs : Contains material which may cause damage to the following organs: upper respiratory tract, central nervous system: (CNS).

Section 12. Ecological information

Ecotoxicity data : Not reported

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

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.

UN Classification : UN1993
UN number : FLAMMABLE LIQUID, N.O.S. (Isopropanol)
Proper shipping name : 3
Class : III
Packing group

See shipping documents for specific transportation information.

Section 15. Regulatory information

HCS Classification : Combustible liquid
Initiating material
Target organ effects
U.S. Federal regulations : All components are listed or exempted.
TSCA 8(b) Inventory : SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification : No products were found.
California Prop. 65 : No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.)
Flammability : 1
Health : 2
Environment : 0

Date of issue : 01-December-2009.
Responsible name : Regulatory Affairs
Date of previous issue : 29-January-2009.
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.