

Material Safety Data Sheet

Lightning Strip

1. Product and company identification

Product name	Lightning Strip	Validation date	7/6/2011.
Material uses	Floor finish remover	Print date	7/6/2011.
In case of emergency	1-800-843-6174	Responsible name	Regulatory Affairs Department
Supplier	Ridley Vacuum & Janitorial Supply 3700 Reveille Houston, TX 77087 713-649-4121		

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

Health	3	HAZARD RATING
Flammability	2	4 = Extreme
Physical hazards	1	3 = High
Personal protection	C	2 = Moderate
		1 = Slight
		0 = Insignificant

A = Goggles B = Goggles & Gloves C = Goggles, Gloves & Apron

2. Hazards identification

Emergency overview	WARNING! FLAMMABLE LIQUID AND VAPOR. COMBUSTIBLE. HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. Flammable liquid. Harmful by inhalation, in contact with skin and if swallowed. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
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Potential acute health effects due to overexposure

Inhalation Maybe toxic by inhalation. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion May be harmful if swallowed. May cause burns to mouth, throat and stomach.

Skin Corrosive to the skin. May cause severe burns.

Eyes Corrosive to eyes. May cause severe burns.

Potential chronic health effects due to overexposure

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.

See toxicological information (section 8)

3. Composition/information on ingredients

Name	CAS number	%
ethylene glycol monobutyl ether	111-76-2	10 - 30
Ethanolamine	141-43-5	5 - 10
BENZYL ALCOHOL	100-51-6	5 - 10
Potassium hydroxide	1310-58-3	1 - 5

SARA 313 (Form R - Reporting requirements)

Product name	CAS number	Concentration
ethylene glycol monobutyl ether	111-76-2	13.022

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

4. First aid measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.

4. First aid measures

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.

5. Fire-fighting measures

Flammability of the product Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable Use dry chemical, CO₂, water spray (fog) or foam.

Special exposure hazards 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.

Hazardous thermal decomposition products Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

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.

Flash point Closed cup: 53°C (127.4°F)

6. Control and preventive measures

Storage Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Eliminate all ignition sources. Separate from acids. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Ingredient	Exposure limits
ethylene glycol monobutyl ether	OSHA PEL (United States, 6/2010). Absorbed through skin. TWA: 50 ppm 8 hour(s). TWA: 240 mg/m ³ 8 hour(s). OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 25 ppm 8 hour(s). TWA: 120 mg/m ³ 8 hour(s). NIOSH REL (United States, 6/2009). Absorbed through skin. TWA: 5 ppm 10 hour(s). TWA: 24 mg/m ³ 10 hour(s). ACGIH TLV (United States, 2/2010). TWA: 20 ppm 8 hour(s).
Ethanolamine	OSHA PEL (United States, 6/2010). TWA: 3 ppm 8 hour(s). TWA: 6 mg/m ³ 8 hour(s). ACGIH TLV (United States, 2/2010). TWA: 3 ppm 8 hour(s). TWA: 7.5 mg/m ³ 8 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m ³ 15 minute(s). OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hour(s). TWA: 8 mg/m ³ 8 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m ³ 15 minute(s). NIOSH REL (United States, 6/2009). TWA: 3 ppm 10 hour(s). TWA: 8 mg/m ³ 10 hour(s). STEL: 6 ppm 15 minute(s). STEL: 15 mg/m ³ 15 minute(s).
BENZYL ALCOHOL	AIHA WEEL (United States, 5/2010). TWA: 10 ppm 8 hour(s).
Potassium hydroxide	OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m ³ ACGIH TLV (United States, 2/2010). C: 2 mg/m ³ NIOSH REL (United States, 6/2009). TWA: 2 mg/m ³ 10 hour(s).

Personal protection

6. Control and preventive measures

Respiratory	None required with adequate ventilation.
Hands	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Methods for cleaning up	
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
Waste disposal	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.

7. Physical and chemical properties

Physical state	Liquid	Boiling/condensation point	100°C (212°F)
Color	Blue	Melting/freezing point	0°C (32°F)
Odor	Mild Solvent	Vapor pressure	<0.13 kPa (<1 mm Hg)
VOC	47.0%	Vapor density	>1 [Air = 1]
pH	12.8 to 13.8	Weight per Gallon:	8.52 lbs./gal.
1% pH:	9.6	Specific Gravity:	1.02 gm/ml

8. Toxicological information

Acute toxicity

Product/ingredient name


	Result	Species	Dose	Exposure	
ethylene glycol monobutyl ether	LD50 Dermal	Rabbit	220 mg/kg	-	
	LD50 Intraperitoneal	Rat	220 mg/kg	-	
	LD50 Intravenous	Rat	307 mg/kg	-	
	LD50 Oral	Rat	917 mg/kg	-	
	LD50 Oral	Rat	250 mg/kg	-	
	LD50 Unreported	Rat	917 mg/kg	-	
	LDLo Oral	Rat	1500 mg/kg	-	
	TDLo Oral	Rat	500 mg/kg	-	
	TDLo Unreported	Rat	250 mg/kg	-	
	LC50 Inhalation Vapor	Rat	2900 mg/m3	7 hours	
	LC50 Inhalation Gas.	Rat	450 ppm	4 hours	
	Ethanolamine	LD50 Dermal	Rabbit	1 mL/kg	-
		LD50 Intramuscular	Rat	1750 mg/kg	-
LD50 Intraperitoneal		Rat	67 mg/kg	-	
LD50 Intravenous		Rat	225 mg/kg	-	
LD50 Oral		Rat	1720 mg/kg	-	
LD50 Subcutaneous		Rat	1500 mg/kg	-	
BENZYL ALCOHOL	LD50 Dermal	Rabbit	2000 mg/kg	-	
	LD50 Intra-arterial	Rat	441 mg/kg	-	
	LD50 Intraperitoneal	Rat	400 mg/kg	-	
	LD50 Intravenous	Rat	53 mg/kg	-	
	LD50 Oral	Rat	1.5 mL/kg	-	
	LD50 Oral	Rat	1660 mg/kg	-	
	LD50 Oral	Rat	1230 mg/kg	-	
	LDLo Intraperitoneal	Rat	650 mg/kg	-	
	LDLo Subcutaneous	Rat	1700 mg/kg	-	
	TDLo Intraperitoneal	Rat	514 mg/kg	-	
Potassium hydroxide	LD50 Oral	Rat	273 mg/kg	-	

Conclusion/Summary Not available

Chronic toxicity

Conclusion/Summary Not available

9. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1719	Caustic alkali liquid, N.O.S. (Monoethanolamine)	8	III		-

PG* : Packing group