

## 1 Material and Supplier Identification

Product Name:	<b>Lightning Degreaser</b>
Description:	NSF Heavy Duty Cleaner/Degreaser
Recommended use of the chemical and restrictions:	Use only for the purpose on product label. This product is not intended to be used without prior dilution if specified on product label.
Supplier's Information:	<b>Maintex</b> 13300 E. Nelson Ave City of Industry, CA 91746 800-446-1888 (Customer Service)
Emergency Telephone:	(800) 255-3924 USA (813)248-0585 International (Chemtel 24 hrs)

## 2 Hazards Identification

Classification of Mixture:	Serious Eye Damage: Category 1 Skin Corrosion: Category 1C Acute Toxicity Inhalation: Category 4	Pictogram
Signal Word:	DANGER	
Hazard Statements:	Causes severe skin burns and eye damage. . Fatal if inhaled	



## Precautionary Statements

General:	KEEP OUT OF REACH OF CHILDREN. Read label before use.
Prevention:	Do not breathe vapours. Wash hands thoroughly after handling. Wear protective gloves and eye protection., Use in a well-ventilated area.
Response:	IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin with water. If skin irritation persists: Get medical attention. 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. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If problem persists, call a Poison Center or get medical attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

## 3 Composition/Information on Ingredients

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>Concentration Range %</u>
Potassium Hydroxide	1310-58-3	10-20
Isopropanol	67-63-0	1-5
2-Butoxyethanol	111-76-2	1-5

## 4 First Aid Measures

Eye Contact:	Flush eyes with water for 15 minutes. Remove contact lenses if any.
Skin Contact:	Contact with concentrate may be an irritant to sensitive skin. If spilt in large areas of skin, rinse immediately with water and remove clothing. Wash skin thoroughly with soap and water.
Inhalation	If discomfort is experienced after prolonged exposure to vapours, move person to fresh air. Get medical attention if irritation persists.
Ingestion:	Get medical attention immediately. Rinse mouth with water. Do NOT induce vomiting. Drink glass of water to dilute product.

## 5 Firefighting Measures

Suitable Extinguishing Media:	Water spray, normal foam, dry agent (carbon dioxide, dry chemical powder.)
Specific Hazards arising from the Chemical:	In a fire or if heated, a pressure increase will occur and the container may burst. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide, and carbon dioxide.
Specific Protective Equipment and Precautions for Firefighters:	Firefighters should wear NIOSH approved self-contained breathing apparatus and protective clothing. If safe to do so, remove containers from path of fire. If involved in a fire, keep containers cool with water spray.

## 6 Accidental Release Measures

Emergency Procedures:	Keep area clear of personnel until area has been properly cleaned.
Personal Precautions/ Protective Equipment:	Slippery when spilt. To avoid accidents, clean up immediately and shut off source of leak, if safe to do so. Wear appropriate protective equipment to prevent any contamination of skin, eyes, and personal clothing. Provide sufficient ventilation.
Environmental Precautions:	If contamination of sewers or waterways has occurred, advise local emergency services.
Methods for Containment and Cleaning Up:	Contain spill with absorbent (soil, sand, or other inert material) or spill kit to prevent contamination of sewers or waterways. Neutralization agent is not recommended within building, as toxic vapors may be omitted. Properly dispose of used absorbents in accordance with local, state, and federal regulations.

## 7 Handling and Storage

Precautions for Safe Handling:	Avoid skin and eye contact, inhalation and ingestion. Wash hands thoroughly after use. Keep out of reach of children.
Conditions for Safe Storage, Including an Incompatibilities:	Store in cool, dry place and out of direct sunlight. Store away from source of heat or ignition. Do not mix with other chemicals. Keep container closed when not in use, and check regularly for leaks.  See Section 10 for incompatible materials.

## 8 Exposure Controls/Personal Protection

### Control Parameters:

#### Hazardous Ingredients

Potassium Hydroxide

Isopropanol

2-Butoxyethanol

#### ACGIH TLV

N/A

TWA 200 ppm

20 ppm

#### OSHA PEL

N/A

TWA 400 ppm

50 ppm

#### NIOSH IDLH

N/A

TWA 400 ppm

N/A

Appropriate engineering controls:

Good ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal Protection

Eye Protection: Use protective glasses or safety goggles if splashing or spray-back is likely.

Hand Protection: Use protective gloves when used for prolong periods or if skin sensitive.

Skin Protection: Use apron if splashing or spray-back is likely.

Respiratory Protection: Use in well ventilated areas or local exhaust ventilation when cleaning small spaces.

Hygiene Measures: Always wash hands after handling chemical products, and before smoking, eating, drinking, or using the toilet. Wash contaminated clothing or protective equipment before storage and re-use.

## 9 Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.08	Vapour Pressure (mm Hg):	< 17 mm Hg
Color:	Red	Evaporation Rate:	< 1	Vapour Density:	> 1
Odor:	Butyl	Solubility in Water:	Complete	Freezing Point (°F):	< 32
pH:	13-14	VOC (g/L):	70	Boiling Point (°F):	> 212
				Flash Point (°F):	> 200

< means less than

> means greater than

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## 10 Stability and Reactivity

Reactivity: No specific data

Chemical Stability: Stable

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid exposure to heat and light.

Incompatible Materials: Slightly reactive or incompatible with oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological Information

### Symptoms:

Eye Contact:	Adverse symptoms may include the following: irritation, watering, redness
Skin Contact:	Adverse symptoms may include the following: irritation, redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing
Ingestion:	Adverse symptoms may include the following: stomach pains

### Acute Toxicity:

Eye Contact:	Causes eye irritation.
Skin Contact:	Causes severe burns.
Inhalation:	Causes respiratory system irritation.
Ingestion:	Causes burns to mouth, throat and stomach

### Toxicity Data:

#### Hazardous Ingredients

	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Potassium Hydroxide	LD50-Oral	Rat	214 mg/kg
Isopropanol	LD 50- Oral	Rat	5045 mg/kg
	LC 50- Inhalation	Rat	16000 ppm
	LD 50- Dermal	Rabbit	12,800 mg/kg
2-Butoxyethanol	LD50 Dermal	Guinea Pig	>2000 mg/kg
	LC0 Inhalation	Guinea Pig	>3.1 mg/l
	LD50 Ingestion	Rat	1,300 mg/kg
	LD50 Ingestion	Guinea	1,400 mg/kg

Chronic Effects: No known significant effects or critical hazards

## 12 Ecological Information

Ecotoxicity: May be harmful to the environment.

### Aquatic Toxicity:

#### Hazardous Ingredients

	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Potassium Hydroxide	LC50	Mosquito Fish	80 mg/l/96 hrs
	LC50	Fathead Minnow	179 mg/l/96 hrs
	EC50	Daphnia magna	60 mg/l/48 hrs
	ErC50	Selenastrum capricornutum	61 mg/L 96 hrs
Isopropanol	LC50	Fathead minnow	9640 mg/l 96 hrs
	EC50	Daphnia Magna	5102 mg/l 24 hrs
	EC50	Green Algae	>2000 mg/l 72 hrs
2-Butoxyethanol	LC50	rainbow trout	1,474 mg/l/96 hrs
	EC50	Water Flea	1,550 mg/l/48 hrs
	EbC50	Green Algae	911 mg/L/72 hrs
	IC50	Bacteria	>1000 mg/L

Other Adverse Effects: No known significant effects or critical hazards.

## 13 Disposal Considerations

Disposal Methods: Diluted product can be flushed to sanitary sewer. Discard empty container in trash. Dispose of waste in accordance with federal, state, and local regulations.

## 14 Transportation 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.

#### Ground Transport

DOT Classification: Regulated

UN Number: UN1760

Transport Hazard Class: 8

Packaging Group:	II
Hazardous Division:	Corrosive liquids, n.o.s
Hazardous Contents:	Potassium Hydroxide

### 15 Regulatory Information

SARA Title III:	Yes	Contains 2-butoxyethanol
California Proposition 65:	No	
Other Regulations:		

### 16 Other Information

HMIS/NFPA Hazard Rating:	Health: 2	Flammability: 1	Reactivity: 0
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The information contained herein is based on the data available to us. It is believed to be correct. NO warranty, expressed or implied, is made regarding the accuracy of this data or the results to be obtained from the use thereof. For further information consult Maintex.

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