

# FIREWORKS Safety Data Sheet



Issue Date: 28-March-2013

## 1. IDENTIFICATION

Product Name: FIREWORKS  
Other means of identification: SDS # USFT-002 UN/ID No: UN1760  
Recommended use: Floor wax stripper / concentrate  
Prepared by: Safety Department  
Source: US Formula Technology / 1000 McFarland 400 Blvd / Alpharetta, GA 30004 USA  
Company Phone Number: 770-813-0008 or 800-728-7972 / Fax: 770-813-0470  
Emergency Telephone (24 Hours)  
INFOTRAC 352-323-3500 (International) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Classification  
Acute toxicity - Oral Category 4  
Acute toxicity - Dermal Category 4  
Acute toxicity - Inhalation (Dusts/Mists) Category 4  
Skin corrosion/irritation Category 1 Sub-category B  
Serious eye damage/eye irritation Category 1  
Specific target organ toxicity (single exposure) Category 3  
Flammable liquids Category 4

Signal word: Danger

Hazard statements  
Harmful if swallowed Harmful in contact with skin.  
Harmful if inhaled  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.  
May cause drowsiness or dizziness  
Combustible liquid



Appearance: Clear green to brown liquid  
Physical state: Liquid / Odor: Ether

Precautionary Statements: **PREVENTION**  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Use in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces — No smoking

Precautionary Statements: **RESPONSE**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Rinse mouth. Do NOT induce vomiting

IN CASE OF FIRE: Use CO<sub>2</sub>, dry chemical, or foam for extinction

Precautionary Statements: **STORAGE**  
Store locked up. Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements: **DISPOSAL**  
Dispose of contents/container at an approved waste disposal plant

Hazards not otherwise classified (HNOC): Not Applicable

Other Information: Harmful to aquatic life with long lasting effects

## 3. COMPOSITION / INFORMATION on INGREDIENTS

Chemical Name	CAS No	Weight-%
2-Butoxyethanol	111-76-2	15-30
Ethanolamine	141-43-5	5-15
Potassium hydroxide	1310-58-3	5-10

## 4. FIRST AID MEASURES

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.

EYE CONTACT: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.  
Get immediate medical advice/attention.

INGESTION: Rinse mouth. DO NOT induce vomiting (aspiration risk). Drink 1/2 cup water, citrus fruit juice, or milk. Call a physician or poison control center immediately.

SKIN CONTACT: Wash off immediately with plenty of water for at least 15 minutes.  
Take off contaminated clothing. Wash contaminated clothing before reuse.  
Call a physician if you feel unwell.

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## section 4 continued (FIRST AID MEASURES)

Most important symptoms and effects, both acute and delayed  
Contact will cause irritation and redness to exposed areas. Causes painful stinging or burning of eyes and lids, watering of eyes. Prolonged contact may even cause severe skin irritation or mild burn. Overexposure by inhalation may cause CNS depression, drowsiness, dizziness, confusion, headache or loss of coordination. Ingestion may cause severe burns to mouth, throat or stomach. Indication of any immediate medical attention and special treatment needed  
Note to physicians: Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray (fog). Alcohol resistant foam. Dry chemical.  
Unsuitable Extinguishing Media: Not determined.  
Specific hazards arising from the chemical: Combustible material. Keep containers cool.  
Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment as required. Remove all sources of ignition. Spills may be slippery. Prevent foot traffic.  
Environmental precautions: Do not discharge outside. Do not permit to escape directly into creeks or other natural waterways.

Methods for containment. Prevent further leakage or spillage if safe to do so.  
Methods for cleaning up large spills: Reclaim liquid with mop and bucket. Filter and save for some use where quality is not critical. Rinse area with clean water and dry before permitting traffic.  
Methods for cleaning up small spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean up in accordance with all applicable regulations.

## 7. HANDLING AND STORAGE

Precautions for safe handling  
Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.  
Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Protect product quality by keeping containers tightly closed when not in use, avoid pouring unused material back into original container. Never use food or beverage containers to measure or transport this product. Empty containers contain residues and should not be used for food or beverage.

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children and pets. Protect from direct sunlight. Store at 40-95°F.

Packaging materials: Keep in original container.  
Incompatible materials: Bleach, strong acids.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Butoxyethanol CAS #111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m3 (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m3 (vacated) S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m3
Ethanolamine CAS #141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m3 (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m3 (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m3	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m3 STEL: 6 ppm STEL: 15 mg/m3
Potassium hydroxide CAS #1310-58-3	Ceiling: 2 mg/m3	(vacated) Ceiling: 2 mg/m3	Ceiling: 2 mg/m3

### Appropriate Engineering Controls

Apply technical measures to comply with the occupational exposure limits.  
Individual protection measures, Appropriate Personal Protective Equipment:  
Eye/face protection: Wear approved safety goggles.

Skin and body protection: Wear butyl rubber or neoprene gloves.

Avoid sneakers, wear rubber overshoes with attached pads for traction, rubber gloves, rubber apron, as appropriate, to prevent skin contact.

Respiratory protection: Under normal conditions, respirator is not normally required.

General Hygiene: Handle in accordance with good industrial hygiene and safety practice.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

pH	>13	Specific gravity	<1
Melting point/freezing point	Not determined	Water solubility	Complete
Boiling point/boiling range	100 °C / 212 °F	Solubility in other solvents	Not determined
Flash point	> 60 °C / > 140 °F	Partition coefficient	Not determined
Evaporation rate	1.0	Autoignition temperature	Not determined
Flammability (solid, gas)	n/a-liquid	Decomposition temperature	Not determined
Flammability limits in air:		Kinematic viscosity	Not determined
Upper flammability limits	10.6%	Dynamic viscosity	Not determined
Lower flammability limit	1.1%	Explosive properties	Not determined
Vapor pressure	Not determined	Oxidizing properties	Not determined
Vapor density	Heavier than air		

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**10. STABILITY AND REACTIVITY**

Reactivity: Not reactive under normal conditions  
 Chemical stability: Stable under recommended storage conditions.  
 Possibility of Hazardous Reactions: None under normal processing.  
 Hazardous polymerization: Hazardous polymerization does not occur.  
 Conditions to avoid: Incompatible materials. Heat.  
 Incompatible materials: Bleach. Strong acids.  
 Hazardous Decomposition Products: Not determined

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure  
 Inhalation: Harmful if inhaled.  
 Eye contact: Causes severe eye damage.  
 Skin Contact: Harmful in contact with skin: Causes severe skin burns.  
 Ingestion: Harmful if swallowed.

**Component Information**

	Oral LD50	Dermal LD50	Inhalation LC50
2-Butoxyethanol CAS #111-76-2	= 470 mg/kg ( Rat )	= 2270 mg/kg ( Rat ) = 220 mg/kg ( Rabbit )	= 2.21 mg/L ( Rat ) 4 h = 450 ppm ( Rat ) 4 h
Ethanolamine CAS #141-43-5	= 1720 mg/kg ( Rat )	= 1 mL/kg ( Rabbit ) = 1025 mg/kg ( Rabbit )	-
Potassium hydroxide CAS #1310-58-3	= 214 mg/kg ( Rat )	-	-

Information on physical, chemical and toxicological effects: please see section 4 of this SDS for Symptoms

Delayed and immediate effects as well as chronic effects from short and long-term exposure  
 Carcinogenicity: Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3	-	-

Legend:  
 ACGIH (American Conference of Governmental Industrial Hygienists)  
 A3 - Animal Carcinogen  
 IARC (International Agency for Research on Cancer)  
 Group 3 IARC components are "not classifiable as human carcinogens"  
 STOT - single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

Numerical measures of toxicity - Not determined

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	672 mg/kg
ATEmix (dermal)	1467 mg/kg
ATEmix (inhalation-gas)	50000 mg/L
ATEmix (inhalation-dust/mist)	2.5 mg/L

**12. ECOLOGICAL INFORMATION**

Ecotoxicity Harmful to aquatic life with long lasting effects

Chemical	Algae / Aquatic plants	Fish	Microorganisms	Crustacea
2-Butoxyethanol CAS #111-76-2		1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50		1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50 1000: 48 h <i>Daphnia magna</i> mg/L EC50
Ethanolamine 141-43-5	15: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 300 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 114 - 196: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through	EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min	65: 48 h <i>Daphnia magna</i> mg/L EC50
Potassium hydroxide 1310-58-3		80: 96 h <i>Gambusia affinis</i> mg/L		

Persistence and degradability: Not determined.

Bioaccumulation: Not determined. Contains no known bioaccumulative ingredients.

Mobility: Not determined.

Chemical Name	Partition coefficient
2-Butoxyethanol CAS #111-76-2	0.81
Ethanolamine CAS #141-43-5	-1.91
Potassium hydroxide CAS #1310-58-3	0.65 / 0.83

Other adverse effects Not determined

**13. DISPOSAL CONSIDERATIONS**

Waste treatment methods: dispose of wastes in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws.

California Hazardous Waste Status: for Potassium Hydroxide #1310-58-3: Toxic /Corrosive

**14. TRANSPORT INFORMATION**

UN ID No	Proper Shipping Name (same for DOT, IATA and IMDG)	Class	PG	RQ
UN1760	Corrosive liquid, n.o.s (potassium hydroxide, ethanolamine)	8,	II	1000 lbs (potassium hydroxide)

Emergency Telephone INFOTRAC 352-323-3500 (International)  
 1-800-535-5053 (North America)  
 Note: Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.



**15. REGULATORY INFORMATION**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ ELINCS - European Inventory of Existing Chemical Substances/  
 / European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances

**US Federal Regulations**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Value
2-Butoxyethanol	111-76-2	15 - 30	1 %

**SARA 311/312 Hazard Categories**

CWA - Reportable Quantities: 1000 lb (Potassium Hydroxide)  
 CWA - Toxic Pollutants  
 CWA - Priority Pollutants  
 CWA - Hazardous Substances: Yes (Potassium Hydroxide)  
 Hazardous Substances RQ: 1000 lb (Potassium Hydroxide)  
 CERCLA/SARA RQ  
 Reportable Quantity: 1000 lb final / 454 kg final (Potassium Hydroxide)

**US State Regulations: U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Butoxyethanol 111-76-2	X	X	X
Ethanolamine 141-43-5	X	X	X
Potassium hydroxide 1310-58-3	X	X	X

**16. OTHER INFORMATION**

**HMIS**

Health hazards: Not determined  
 Flammability: Not determined  
 Physical hazards: Not determined  
 Personal protection: Not determined



0 = minimal risk  
 1 = slight risk  
 2 = moderate risk  
 3 = serious risk  
 4 = extreme risk

**Disclaimer**

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