

# MISSION IMPOSSIBLE Safety Data Sheet



Issue Date: 06-Nov-2015  
Prepared by: Safety Department

## 1. IDENTIFICATION

Product Name: MISSION IMPOSSIBLE  
Other means of identification: Stripper booster  
Recommended use: Amending floor wax stripper solutions  
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 Number (24 Hours): 1-800-535-5053 INFOTRAC (USA) /  
International: 001-352-323-3500

## 2. HAZARDS IDENTIFICATION

Classification	
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin irritation	Category 2
Serious eye damage/eye irritation	Category 2 A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 4

Signal word: WARNING

Hazard statements:

Combustible liquid  
May be fatal if swallowed and enters airways  
Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation



Appearance: Transparent  
Physical state: Liquid / Odor: Characteristic mild sweet ethereal odor

Precautionary Statements: **PREVENTION**

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

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-%
Ethylene glycol monobutyl ether	111-76-2	80-100

## 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.

## section 4 continued (FIRST AID MEASURES)

Most important symptoms and effects, both acute and delayed  
Contact may cause irritation and redness to exposed areas.  
Causes painful stinging of eyes and lids, watering of eyes.  
Prolonged contact may even cause skin irritation.  
Overexposure by inhalation may cause headache  
Ingestion may cause irritation to mouth, throat or stomach.  
Indication of any immediate medical attention and special treatment needed: not determined  
Notes to physician: This material may have a mechanism of intoxication similar to ethylene glycol. On that basis, treatment similar to ethylene glycol intoxication may be of benefit.  
In cases where several ounces (60 - 100 ml) have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment. Methyl pyrazole (Antizol®) is an effective blocker of alcohol hydrogenase and should be used if available. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Repeated excessive exposure may aggravate preexisting blood disease (anemia).

## 5. FIRE-FIGHTING MEASURES

Combustible.  
Suitable Extinguishing Media: Water spray (fog). Alcohol 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. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

## 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
Ethylene glycol monobutyl ether CAS #111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* Absorbed via skin	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>

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 glasses.

Skin and body protection:

Preferred glove materials: butyl rubber or Ethyl vinyl alcohol laminate ("EVAL")

Acceptable alternative glove barrier materials include: Natural rubber ("latex"), Neoprene.

Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl").

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

Other protection: Use protective clothing chemically resistant to this material as above. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Under normal conditions, respirator is not normally required. Individual sensitivity varies. Organic vapor cartridge respirators are effective as needed.

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



## 9. PHYSICAL AND CHEMICAL PROPERTIES

pH	no data available	Specific gravity	0.9 at 20°C = 68°F
Melting point/freezing point	-75°C / -103°F	Density	7.53 lb/g at 20 °C (68 °F)
Boiling point/boiling range	171°C / 340°F	Water solubility	Complete
Flash point	> 60 °C / > 140 °F	Solubility in other solvents	Not determined
Evaporation rate (BA=1)	0.06	Partition coefficient:	
Flash Point (Closed Cup)	67°C (153 °F)	(n-octanol/water)	log Pow: 0.81 Measured
Flammability limits in air:		Autoignition temperature	230 °C (= 446 °F)
Upper flammability limit	1.3% vol	Decomposition temperature	Not determined
Lower flammability limit	10.6% vol	Kinematic viscosity	3.7 mm <sup>2</sup> /s at 20 °C (68 °F)
Vapor pressure:		Dynamic viscosity	3.3 mPa.s at 20 °C (68 °F)
0.87 mmHg at 20 °C (68 °F) ASTM E1719		Explosive properties	Not determined
Vapor density	no test data	Oxidizing properties	Not determined

## 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  
 May be fatal if swallowed and enters airways  
 Harmful if swallowed  
 Causes skin irritation  
 Causes serious eye irritation

## Component Information

	Oral LD50	Dermal LD50	Inhalation
Ethylene glycol monobutyl ether CAS #111-76-2	Guinea pig, 1,400 mg/kg Rat, 1,300 mg/kg	Guinea pig, > 2,000 mg/kg	LC0, Guinea pig, 1 Hr, vapor, > 3.1 mg/l No deaths at this level

**Acute oral toxicity:** Ethylene glycol monobutyl ether has low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Massive ingestion of ethylene glycol monobutyl ether (attempted suicides) may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

**Acute dermal toxicity:** Prolonged skin contact to animals which are less sensitive to hemolysis, as are humans, did not result in the absorption of harmful amounts. Humans and guinea pigs are resistant to blood effects that are seen for rodents and rabbits. For this reason, the guinea pig data is used as the basis for the acute toxicity classification as it is a better model to assess acute toxicity to humans.

**Acute inhalation toxicity:** Excessive exposure may cause irritation to upper respiratory tract (nose and throat). In humans, symptoms may include: Headache. In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

**Skin corrosion/irritation** Brief contact with ethylene glycol monobutyl ether may cause slight skin irritation with local redness. Repeated exposure may cause irritation, even a burn. May cause more severe response on covered skin (under clothing, gloves).

**Serious eye damage/eye irritation** Ethylene glycol monobutyl ether may cause severe eye irritation. May cause moderate corneal injury. Effects may be slow to heal. Vapor may cause eye irritation experienced as mild discomfort and redness.

**Sensitization** Ethylene glycol monobutyl ether did not cause allergic skin reactions when tested in humans. Did not cause allergic skin reactions when tested in guinea pigs. For respiratory sensitization: No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)** Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)** In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

**Carcinogenicity** In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.

**Teratogenicity** Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

**Reproductive toxicity** In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

**Mutagenicity** In vitro genetic toxicity studies with ethylene glycol monobutyl ether were predominantly negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard** Based on physical properties, not likely to be an aspiration hazard

**Carcinogenicity for Component (s)**

Ethylene glycol monobutyl ether is classified by ACGIH as "A3" (=Confirmed animal carcinogen with unknown relevance to humans)

## 12. ECOLOGICAL INFORMATION

**Toxicity Acute toxicity to fish** Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 1,474 mg/l, OECD Test Guideline 203

**Acute toxicity to aquatic invertebrates** EC50, Daphnia magna (Water flea), static test, 48 Hour, 1,550 mg/l, OECD Test Guideline 202

**Acute toxicity to algae/aquatic plants** EbC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Biomass, 911 mg/l, OECD Test Guideline 201

**Toxicity to bacteria** IC50, Bacteria, Growth inhibition, > 1,000 mg/l

**Chronic aquatic toxicity**

**Chronic toxicity to fish** NOEC, Danio rerio (zebra fish), semi-static test, 21 d, > 100 mg/l

**Chronic toxicity to aquatic invertebrates** NOEC, Daphnia magna (Water flea), semi-static test, 21 d, Other, 100 mg/l

**Persistence and degradability**

**Biodegradability:** Readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability). 10-day Window: Pass

**Biodegradation:** 90.4 % **Exposure time:** 28 d OECD Test Guideline 301B or Equivalent **Theoretical Oxygen Demand:** 2.30 mg/mg

Chemical Oxygen Demand: 2.21 mg/g Dichromate Biological oxygen demand (BOD)

Incubation Time BOD 5 d = 5.2 % / 10 d = 57 % / 20 d = 72.2 %

Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.81 Measured

Bioconcentration factor (BCF): 3.2

Mobility in soil Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient (Koc): 67 Estimated.

## 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.

## 14. TRANSPORT INFORMATION

Not regulated for transport. Emergency Telephone INFOTRAC 352-323-3500  
1-800-535-5053 (North America)

## 15. REGULATORY INFORMATION

**OSHA Hazard Communication Standard** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**  
Fire Hazard / Acute Health Hazard / Chronic Health Hazard

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372: Ethylene glycol monobutyl ether CAS #111-76-2

**US State Regulations:**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol monobutyl ether CAS #111-76-2	X	X	X

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)** This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**United States TSCA Inventory (TSCA)** All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

**HMIS**

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

NFPA



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

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.