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Version 1.06

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product name** 80-1614 Bio-Maxx Solvent**Recommended use of the chemical  
and restrictions on use****Product code** 80-1614**Product Type****Synonyms****Supplier's details**Extremely Flammable Aerosol  
None**Recommended Use****Uses advised against****Manufactured For:**Kimball Midwest  
4800 Roberts Rd.  
Columbus, OH 43228  
800-233-1294Bio-Based Solvent Degreaser.  
No information available**Emergency telephone number****Chemical Emergency Phone  
Number**

Chemtrec 1-800-424-9300

**Company Emergency Phone  
Number**

800-233-1294

## 2. HAZARDS IDENTIFICATION

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin Sensitization	Category 1
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

### GHS Label elements, including precautionary statements

#### Emergency Overview

#### DANGER

##### Hazard Statements

Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction.  
 Extremely Flammable Aerosol  
 Contains gas under pressure; may explode if heated



**Appearance** Clear

**Physical state** Aerosol

**Odor** Slight Fragrance

##### Precautionary Statements - Prevention

Wear cold insulating gloves/face shield/eye protection.  
 Wash hands thoroughly after handling  
 Wear protective gloves  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing must not be allowed out of the workplace  
 Keep away from heat/sparks/open flames/hot surfaces.-No smoking.  
 Do not spray on an open flame or other ignition source.  
 Pressurized container: Do not pierce or burn, even after use

##### Precautionary Statements - Response

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 advice/attention  
 IF ON SKIN: Wash with plenty of soap and water.  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

##### Precautionary Statements - Storage

Store locked up  
 Protect from sunlight. Store in a well-ventilated place  
 Do not expose to temperatures exceeding 122°F (50°C)

##### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

##### Hazards not otherwise classified (HNOC)

None

**Other information**

0% of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %*
1,1-DIFLUOROETHANE	75-37-6	10-20
ETHOXYLATED ALCOHOL	68439-46-3	1-10
D-LIMONENE	5989-27-5	1-10

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures for different exposure routes**

<b>General advice</b>	Under normal conditions of intended use, this product does not pose a risk to Health.
<b>Eye contact</b>	Rinse cautiously with water for at least 15 minutes. Remove any contact lenses, if present and easy to do. Continue rinsing.
<b>Skin contact</b>	Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Rinse immediately with plenty of water for 15 minutes and seek medical advice if skin irritation persists.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

**Most important symptoms/effects, acute and delayed**

<b>Main Symptoms</b>	Causes eye irritation . May skin , respiratory irritation, and drowsiness or dizziness. Harmful if swallowed and enters airways. May cause allergic skin reaction.
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**Indication of immediate medical attention and special treatment needed, if necessary**

<b>Notes to physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Water fog. Dry chemical. Foam. Carbon dioxide (CO<sub>2</sub>). Cool containers / tanks with water spray.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

Keep product and empty container away from heat and sources of ignition.

**Explosion Data**

**Sensitivity to Mechanical Impact** none.

**Sensitivity to Static Discharge** Yes.

#### **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. Use shielding to protect fire-fighters from bursting containers.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation.

#### **Environmental precautions**

**Environmental precautions** Report spills as required by local and federal regulations.

#### **Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Contain liquid and collect with an inert, non-combustible material.

### **7. HANDLING AND STORAGE**

#### **Precautions for safe handling**

**Advice on safe handling** Irritating to eyes. Avoid inhaling vapors or mists. Harmful if inhaled. May cause respiratory irritation if inhaled. May cause drowsiness or dizziness. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Use with adequate ventilation. to keep the exposure levels below the Occupational Exposure Limits.

#### **Conditions for safe storage, including any incompatibilities**

**Technical measures/Storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible products** Strong acids, alkalis, and oxidizing agents. Carbon oxides.

**Aerosol Level** 3

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control parameters**

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,1-DIFLUOROETHANE 75-37-6	TWA 1000 PPM 8 hours	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

#### **Exposure controls**

**Engineering Measures** Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits.

#### **Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields.

**Skin and body protection** Chemical resistant apron. Protective gloves.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and chemical properties**

<b>Physical state</b>	Aerosol	<b>Odor</b>	Slight Fragrance
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	
<b>Color</b>	Light Amber		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Methods</u></b>
<b>pH</b>	No information available	
<b>Melting/freezing point</b>	No information available	
<b>Boiling point/boiling range</b>		
<b>Flash Point</b>	-50 °C / -58 °F	Based on propellant
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limits in Air</b>		
upper flammability limit		
lower flammability limit		
<b>Vapor pressure</b>		
<b>Vapor density</b>		
<b>Specific Gravity</b>	0.907	
<b>Water solubility</b>	Practically insoluble	
<b>Partition coefficient: n-octanol/water</b>		
<b>Autoignition temperature</b>	No information available	Not applicable
<b>Decomposition temperature</b>		
<b>Viscosity</b>	No information available	
<b>Explosive properties</b>		

**Other information**

<b>VOC Content(%)</b>	8.56
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## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

Strong acids, alkalis, and oxidizing agents. Carbon oxides.

**Hazardous Decomposition Products**

Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known information
<b>Inhalation</b>	Inhalation may cause, nose, throat, and respiratory tract irritation, coughing, headache.
<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin contact</b>	Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.
<b>Ingestion</b>	Harmful if swallowed and enters airways.

**Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ETHOXYLATED ALCOHOL 68439-46-3	= 1400 mg/kg ( Rat )	-	-
D-LIMONENE 5989-27-5	= 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-

**Information on toxicological effects**

<b>Symptoms</b>	Causes serious eye and skin irritation. May cause respiratory irritation. Harmful if swallowed and enters airways.
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**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Irritating to skin.
<b>Eye damage/irritation</b>	Irritating to eyes.
<b>Sensitization</b>	May cause sensitization by skin contact.
<b>Germ Cell Mutagenicity</b>	None known.
<b>Carcinogenicity</b>	There are no carcinogenic chemicals in this product.
<b>Reproductive toxicity</b>	This product does contain a chemical which is a known or suspected reproductive hazard.
<b>Specific target organ systemic toxicity (single exposure)</b>	No known effect based on information supplied.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	No known effect based on information supplied.
<b>Aspiration hazard</b>	No known effect based on information supplied.

**Numerical measures of toxicity - Product Information**

<b>Unknown Acute Toxicity</b>	0% of the mixture consists of ingredient(s) of unknown toxicity.
<b>The following values are calculated based on chapter 3.1 of the GHS document .</b>	
<b>ATEmix (oral)</b>	20233 mg/kg
<b>ATEmix (dermal)</b>	98364 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
D-LIMONENE 5989-27-5	-	0.619 - 0.796 mg/L LC50 Pimephales promelas 96h flow-through 35 mg/L LC50 Oncorhynchus mykiss 96h	-	-

**Persistence and degradability**

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**Bioaccumulation**

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**Other adverse effects** No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment

**Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations.

**Contaminated packaging** Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

**DOT Ground** CONSUMER COMMODITY ORM-D  
or  
LIMITED QUANTITY

**IATA** UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.

**IMDG** UN1950, AEROSOLS, 2.1, LTD.QTY

### 15. REGULATORY INFORMATION

#### International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
1,1-DIFLUOROETHANE	X	X	X	X	X	X	X	X
ETHOXYLATED ALCOHOL	X	X	Not listed	X	X	X	X	X
D-LIMONENE	X	X	X	X	X	X	X	X

#### Legend:

**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 Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

#### U.S. Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Star Hazard</b>	Yes

<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	Yes
<b>Reactive Hazard</b>	no

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any known Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,1-DIFLUOROETHANE 75-37-6	X	X	

**EPA Pesticide Registration Number** Not applicable

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

<b>16. OTHER INFORMATION</b>
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<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 4	<b>Instability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 4	<b>Physical Hazard</b> 1	<b>Personal protection</b> B

**Prepared By** Regulatory Affairs  
**Issuing date** 26-Jun-2017  
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**Revision Note**

(M)SDS sections updated

**Disclaimer**

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**End of Safety Data Sheet**