


## Material Safety Data Sheet

	<b>Red Bird</b>	<b>Health:</b>	<b>2 - Moderate</b>
	<b>S e r v i c e</b>	<b>Fire:</b>	<b>2 - Moderate</b>
		<b>Reactivity:</b>	<b>0 - Minimal</b>

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MSDS: 99172

Prep Date: 3/22/1998

Product: 2-Butoxyethanol

Revision: 2

### Section 1 - Chemical Product and Company Identification

**Product Chemical Name:** 2-Butoxyethanol

**Chemical Formula:**

**CAS No:**

**Manufacturer:** Red Bird Services PO Box 155 205 Western Avenue Osgood IN 47037

**For Emergency, Call Chemtree 24 hours a day....800-424-9300**

**Catalog Number:** 12715

**Synonym:** Butyl Cellosolve Solvent, 2-Butoxyethanol ; Ethylene Glucol monobutyl ether

### Section 2 - Composition/Information on Ingredients

Ingredients	CAS Number	% wt or N
2-Butoxyethoxy Ethanol	111-76-2	100

OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
25ppm	50ppm.	127mg/m3	127mg/m3	Not listed	Not estab.	Not estab.

### Section 3 - Hazard Information

**Primary Entry Route:** Eyes, skin, nose respiratory and digestive track

**Target Organs:** Eyes, skin, digestion system, respiratory system.

**Acute Effects:** May be harmful to fatal if swallowed, inhaled, or can cause severe burns to target organs.

**Inhalation:** Irritant to fatal

**Eye:** Irritant to severe burns

**Skin:** Irritant to severe burns

**Ingestion:** Irritant to fatal

**Carcinogenicity:** None Listed

**Medical Conditions:** None listed

**Chronic Effects:** None Listed

**Section 4 - First Aid Measures**

**Inhalation:** Move to fresh air, give oxygen if difficulty in breathing. Get medical attention.

**Eye Contact:** Flush with water for at least 15 minutes, including under eyelids. Get medical attention

**Skin Contact:** Flush with water for 15 minutes. If irritation persists, get medical attention.

**Ingestion:** Give water to drink to dilute material. Induce vomiting. Never give anything by mouth to anyone who is unconscious or convulsing. Get medical attention.

**Special Precautions:** NA

**Section 5 - Fire Fighting Measures**

**Flash Point:** 171.2

**Burning Rate:** N/A

**Auto Ignition:** N/A  
**Temperature**

**LEL:** N/A

**UEL:** N/A

**Flammability**  
**Classification:** 3

**Extinguishing**

**Media:** Use that of surrounding fire.

**Unusual Fire/Explosion Hazards:** Highly flammable.

**Hazardous Combustion Products:** Carbon oxide fumes.

**Instructions:** Do not release runoff from fire control methods, to sewers, or waterways.

**Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (scba) with a full facepiece operated with pressure demand or positive-pressure mode.

**Section 6 - Accidental Release Measures**

**Spill/Leak Procedures:** Eliminate all sources of ignition. Use only well-grounded equipment.

**Small Spills:** collect for disposal.

**Large Spills:** For containment; dike far ahead of the spill. Absorb with non-flammable material and collect for proper disposal in approved hazardous waste landfill.

**Regulatory Requirement:** Follow applicable OSHA regulations (29 CFR 1910.120).

### **Section 7 - Handling and Storage**

#### **Handling**

**Precautions:** Wear safety glasses, goggles, or face shield, safety gloves, personal protective clothing as required in section 8 in this MSDS.

#### **Storage**

**Requirements:** Store in closed container, cool, dry, in well-ventilated area, away from source of heat, and incompatible materials.

#### **Regulatory**

**Requirement:** See section 15 of this MSDS.

### **Section 8 - Exposure Controls/ Personal Protection**

#### **Engineering**

**Controls:** N/A

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

#### **Administrative**

**Controls:** N/A

#### **Respiratory**

**Protection:** Seek professional advise prior to respirator selection and use, Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Select respirator based on it's suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels or storage tanks), wear an SCBA. Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

#### **Protective**

##### **Clothing/**

**Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety glasses. Per OSHA eye-and-face-ptotection regulations (29 CFR 1910.133).

#### **Safety**

**Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

#### **Contaminated**

**Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Contact lenses are not safety protection; soft lenses absorb and all lenses concentrate exposure. Practice good personal hygiene after use of this material especially before eating, drinking, smoking, using the toilet or applying cosmetics. Never eat, drink, or smoke in work areas.

### **Section 9 - Physical and Chemical Properties**

**Physical State:** liquid

**Odor Threshld:** N/A

**Vapor Press:** 41@ 21c

**Vapor Density:** 3.9

**pH:** NA

**Boiling Point:** 98.99 c

**Freezing/ Melting Point:** -107 c

# *Material Safety Data Sheet*

Page 4

**Formula Weight:** N/A

**Viscosity:** N/A

**Density:** N/A

**Refract Index:** N/A

**Spec Gravity:** 0.692

**Surface Tension:** N/A

**% Volatile:** NA

## **Appearance**

**Odor:** odorless liquid.

## **Evaporation**

**Rate:** NA

## **Water**

**Solubility:** Not Listed.

## *Section 10 - Stability and Reactivity*

**Stability:** Not Listed.

**Polymerization:** Cannot not occur.

## **Chemical**

**Incompatibilities:** oxidizers.

**Conditions to Avoid:** N/A.

## **Hazardous**

### **Decomposition**

**Products:** Toxic and corrosive fumes.

## *Section 11 - Toxicological Information*

**Eye Effect:** Harmful.

**Skin Effect:** Harmful.

## **Acute**

### **Inhalation**

**Effects:** Harmful.

### **Acute Oral**

**Effects:** Harmful.

**Chronic Effects:** See section 3 in this MSDS.

**Carcinogenicity:** Not listed.

**Mutagenicity:** Not listed.

**Teratogenicity:** Not listed.

## *Section 12 - Ecological Information*

**Ecotoxicity:** N/A

## **Environmental**

**Fate:** N/A

**Environmental  
Transport:** N/A

**Environmental  
Degradation:** N/A

**Soil  
Absorption  
Mobility:** N/A

**Section 13 - Disposal Considerations**

**Disposal:** See section 6 of this MSDS

**Disposal  
Regulatory  
Requirements:** See section 15 of this MSDS.

**Container  
Cleaning and  
Disposal:** N/A

**Section 14 - Transport Information**

**Shipping Name:** Ethylene Glycol Monobutyl Ether

**Shipping Symbol:** N/A

**Hazard Class:** 6.1

**Id No:** UN2369

**Packing Group:** III

**Label:** Keep Away From Food

**Special Provision:** N/A

**Packaging  
Exceptions:** N/A

**Nn-Blk Packaging:** N/A

**Bulk Packaging:** N/A

**Quantity Limitations:**

**Passenger, Air, or Rail:** N/A

**Cargo Aircraft Only:** N/A

**Vessel Stowage Requirements:**

**Vessel Stowage:** N/A

**Other:** N/A

**Section 15 - Regulatory Information**

EPA Regulation:  
RCRA hazardous waste number: listed (40 CFR 261.33)  
RCRA hazardous Waste classification: (40 CFR 261.??): classified.  
CERCLA hazardous Substance (40 CFR 302.4): not listed specific peer RCRA, Sec 3001; CWA, Sec 311 (b)(4); CWA.,Sec 307(a),  
CAA:  
CERCLA Reportable Quality (RQ):  
SARA 311/312 Codes:  
SARA Toxic Chemical (40 CFR 372.65):  
SARA EHS (Extremely hazardous substance)(40 CFR 355): listed, Threshold Planning Quality (TPQ) Not Listed  
OSHA Regulations:  
Air contaminant (29 CFR 1910.1000, Table Z-1-A):  
OSHA Specifically Regulated Substance(29 CFR 1910.1000):  
State Regulations: STCC Listed,  
DOT(40 CFR 172.101 Append.):listed  
ACGIH Threshold Limit Value:

MAK: listed  
TSCA: listed  
ANNEX I: listed

***Section 16 - Other Information***

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**Approved By: Gene Feith      Operation Manager      Red Bird Service**

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