

SAFETY DATA SHEET

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>SYNONYM</u>	<u>CAS NO.</u>	<u>% BY WEIGHT</u>
2-butoxyethanol	EGBE, Butyl cellosolve Ethylene glycol monobutyl ether	111-76-2	5 – 15
Potassium metasilicate	None	1312-76-1	1 – 10

If Chemical Name/CAS No is "proprietary" and/or % By Weight is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

EYES:	Immediately flush with large quantities of cool water continuously for at least 15 minutes. Call a physician.
SKIN:	Immediately flush with large quantities of cool water continuously for at least 15 minutes. Call a physician. Remove contaminated clothing and shoes. Do not put contaminated clothing and shoes back on. Wash clothing and shoes thoroughly in soap and water; rinse repeatedly in clean water and dry before reuse.
INGESTION:	DO NOT INDUCE VOMITING. Give water. Call a physician. DO NOT give anything by mouth if the person is unconscious or if having convulsions.
INHALATION:	Move subject to fresh air and get medical attention.
PRIMARY ROUTE(S) OF ENTRY:	Eyes, skin.

MOST IMPORTANT SYMPTOMS / EFFECTS, ACUTE AND DELAYED:

EYE CONTACT:	Contacted areas may exhibit irritation. Acute overexposure without water flushing may result in burns.
SKIN CONTACT:	Contacted areas may exhibit irritation.
INGESTION:	May be harmful if swallowed. May cause irritation or burns.
INHALATION:	May cause nasal and respiratory irritation.
CHRONIC SYMPTOMS:	Chronic overexposure to 2-butoxyethanol has apparently been found to cause liver and kidney injury, blood abnormalities, and gastrointestinal effects in laboratory animals.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:

If you experience any of the symptoms / effects listed above seek medical advice.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use extinguishing media as appropriate for surrounding fire.

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Not considered flammable or explosive. Hazardous reactions will not occur under normal conditions.

ADVICE FOR FIRE FIGHTERS:

Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep containers cool.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, sulfur oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Avoid all contact with skin, eyes and clothing. Wear safety eyewear to protect against unexpected splashes. Wear suitable protective clothing. Use NIOSH / MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Contain liquid spills with sand and absorb on inert material. Dispose with solid waste. See Waste Disposal Method. Do not discharge to sewers or waterways without proper treatment.

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SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Wear proper safety equipment when handling this product. Handle in accordance with good industrial hygiene and safety procedures.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:

Normal for alkaline materials. Store away from acids and strong oxidizing agents. Keep container closed when not in use.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES: No ingredients identified by OSHA as hazardous are known to be present above de minimus levels.

<u>CHEMICAL IDENTITY</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
2-butoxyethanol	111-76-2	50 ppm (skin)	20 ppm
Potassium metasilicate	1312-76-1	N.E.	N.E.

ENGINEERING CONTROLS:

Use good ventilation. Local exhaust is recommended if TLVs are exceeded.

INDIVIDUAL PROTECTION MEASURES:

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

RESPIRATORY PROTECTION:

In absence of proper environmental control, use NIOSH / MSHA approved positive pressure supplied air respirator for mists where airborne exposure is excessive.

SKIN PROTECTION:

Impermeable gloves. Other equipment as required to avoid contact.

EYE PROTECTION:

Safety eyewear to protect against unexpected splashes.

GENERAL HYGIENE CONSIDERATIONS:

Eyewash facility and emergency shower should be in close proximity. Always wash hands after handling any chemical.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, blue liquid.
ODOR:	Mild.
ODOR THRESHOLD:	Not available.
pH (100%):	13.1 – 13.6
MELTING POINT/FREEZING POINT	25°F.
INITIAL BOILING POINT AND BOILING RANGE	212°F (100°C)
FLASH POINT (METHOD USED)	Not available.
EVAPORATION RATE	1.0 (water = 1).
FLAMMABILITY (SOLID, GAS)	Not available.
UPPER/LOWER FLAMMABLE OR EXPLOSIVE LIMIT	Not available.
VAPOR PRESSURE	Not available.
VAPOR DENSITY	Not available.
SPECIFIC GRAVITY	1.04
SOLUBILITY IN WATER	Complete.
PARTITION COEFFICIENT: N-OCTANOL/WATER	Not available.
AUTO-IGNITION TEMPERATURE	Not available.
VISCOSITY, DYNAMIC	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VISCOSITY	Not available.

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SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Hazardous reactions will not occur under normal conditions.
CHEMICAL STABILITY:	Stable under recommended handling and storage conditions (see Section 7).
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	No data found
INCOMPATIBLE MATERIALS:	Strong oxidizing agents, acids.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide, sulfur oxides.

SECTION 11: TOXOLOGICAL INFORMATION

ACUTE TOXICITY:	Not classified.
LD50 AND LC50 DATA:	Not available.
ROUTES OF EXPOSURE / SYMPTOMS	
EYES:	Contacted areas may exhibit irritation. Acute overexposure without water flushing may result in burns.
SKIN:	Contacted areas may exhibit irritation.
INGESTION:	May be harmful if swallowed. May cause irritation or burns.
INHALATION:	May cause nasal and respiratory irritation.
GERM CELL MUTAGENICITY:	Not classified.
TERATOGENICITY:	Not available.
CHRONIC EFFECTS / CARCINOGENICITY:	This material contains no ingredient above de minimus concentrations known or suspected to cause cancer. Chronic overexposure to 2-butoxyethanol has apparently been found to cause liver and kidney injury, blood abnormalities and gastrointestinal effects in laboratory animals. The injury to the liver and kidneys is believed to be secondary to red blood cell hemolysis, a known effect of 2-butoxyethanol in rodents. Humans are resistant to the hemolytic effects of 2-butoxyethanol and therefore the kidney and liver injury noted in animal studies is not considered relevant to human health hazard evaluation.
SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure):	May cause damage to organs (liver and kidney) through prolonged or repeated exposure.
REPRODUCTIVE TOXICITY:	Not classified.
SPECIFIC TARGET ORGAN TOXICITY (Single exposure):	Not classified.
ASPIRATION HAZARD:	Not classified.
COMPONENT INFORMATION:	
2 -butoxyethanol	LD50 Oral Rat: 560 mg/kg LD50 Dermal Rabbit: 400 mg/kg LC50 Inhalation Rat: 450 mg/l/4hr
Potassium metasilicate	LD50 Oral Rat: 1280 mg/kg LD50 Dermal: No data LC50 Inhalation: No data

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	LC50 <i>Ceriodaphnia dubia</i> : 408.92 mg/L/48hr
PERSISTENCE AND DEGRADABILITY:	Not available.
BIOACCUMULATIVE POTENTIAL:	Not available.
MOBILITY IN SOIL:	Not available.
OTHER ADVERSE EFFECTS:	This material contains no hazardous air pollutants (HAPS).

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD	Normal for alkaline wastes. May require pH adjustment for neutralization. Dispose in accordance with local, state and federal regulations.
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SECTION 14: TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Compound, cleaning, NOI, liquid
HAZARD CLASS: Not applicable.
IDENTIFICATION NUMBER: Not applicable.
PACKING GROUP: Not applicable.
EMERGENCY RESPONSE GUIDE: Not applicable.

SECTION 15: REGULATORY INFORMATION

VOC: 0.61 pounds per gallon (73 grams per liter).
TSCA STATUS: All ingredients are listed on the TSCA inventory.
CERCLA REPORTABLE QUANTITY: None established.

SARA 311 / 312 HAZARD CLASSES

<input checked="" type="checkbox"/>	ACUTE HEALTH
	FIRE
	SUDDEN RELEASE OF PRESSURE
<input checked="" type="checkbox"/>	CHRONIC HEALTH
	REACTIVE

SARA 312 INFORMATION

Storage of 10,000 pounds or more may require filing a Tier 2 form. Threshold planning quantity for reporting is 10,000 pounds. This material is not an extremely hazardous substance (EHS).

SARA 313 INFORMATION

This material contains the following substances subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

CHEMICAL NAME

2-butoxyethanol

CATEGORY CODE

N230

CAS NUMBER

111-76-2

% BY WEIGHT

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STATE REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65

California has not identified the ingredients listed in Section 3 as known to cause cancer or reproductive toxicity.

SECTION 16: OTHER INFORMATION

SDS STATUS: Revised sections 2, 3, 12, and 16 on 10-13-16.

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

FOR INDUSTRIAL USE ONLY – KEEP OUT OF THE REACH OF CHILDREN