



# SAFETY DATA SHEET

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## K-Zero

### SECTION 1: PRODUCT & COMPANY IDENTIFICATION

**Product Code:** 1805  
**Product Name:** K-ZERO  
**Company Name:** **KIRBY CHEMICAL & RESTAURANT  
SUPPLY**  
**809 S. EASTMAN RD.**  
**LONGVIEW, TX 75602**  
**Phone Number:** (903)757-2723  
**Emergency Contact:** CHEM-TEL, INC. (800)255-3924  
**Intended Use:** CLEANER

### SECTION 2: HAZARD(S) IDENTIFICATION

**Acute Toxicity: Inhalation, Category 4**  
**Acute Toxicity: Oral, Category 4**  
**Acute Toxicity: Skin, Category 4**  
**Skin Corrosion/Irritation, Category 3**  
**Serious Eye Damage/Eye Irritation, Category 2**



**GHS Signal Word: Warning**

**GHS Hazard Phrases:**

H332 - Harmful if inhaled.  
H302 - Harmful if swallowed.  
H312 - Harmful in contact with skin.  
H316 - Causes mild skin irritation.  
H319 - Causes serious eye irritation.

**GHS Precaution Phrases:**

P271 - Use only outdoors or in a well-ventilated area.  
P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P362+364 - Take off contaminated clothing and wash it before reuse.

**GHS Response Phrases:**

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a Poison Control Center or doctor if you feel unwell.  
P301+312 - IF SWALLOWED: Seek medical attention if you feel unwell.  
P330 - Rinse mouth.  
P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+313 - If eye irritation persists, get medical advice/attention.

**GHS Storage and Disposal Phrases:**

P501 - Dispose of contents/container via locally approved methods.

#### Hazard Rating System:

##### HMIS

**Health: 1**  
**Flammability: 1**  
**Physical: 0**  
**PPE: B**

##### NFPA

**Health: 1**  
**Flammability: 2**  
**Instability: 1**  
**Special Hazard: N/A**



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**Potential Health Effects (Acute and Chronic):** Chronic ingestion may cause lactic acidosis and possible seizures. Exposure to large doses may cause central nervous system depression. May cause liver and kidney damage.

**Inhalation:** Low hazard for normal industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation. Material has a low vapor pressure at room temperature, so exposure to vapor is not likely. Harmful if inhaled. May cause respiratory tract irritation. May cause narcotic effects in high concentration. May cause lung damage. May cause anemia. May cause central nervous system effects such as nausea and headache.

**Skin Contact:** Allergic reactions have been reported. Prolonged contact is essentially non-irritating to skin. Repeated exposures may cause problems. Negative results have consistently been obtained in guinea pigs studies for sensitization. 1,2-Propylene glycol is not considered an occupational skin sensitizer. (CHEMINFO) Causes skin irritation. Causes symptoms similar to those of inhalation. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans.

**Eye Contact:** May cause slight transient injury. Causes eye irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause hemoglobinuric nephrosis. May cause changes in surface EEG. No hazard expected in normal industrial use. May cause irritation of the digestive tract.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
57-55-6	Propylene glycol {1,2-Propanediol }	<50.0 %
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	< 5.0 %

### SECTION 4: FIRST-AID MEASURES

#### Emergency and First Aid Procedures:

**In Case of Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, give oxygen. No specific treatment is necessary since this material is not likely to be hazardous by inhalation. Get medical aid immediately. Remove from exposure and move to fresh air immediately.

**In Case of Skin Contact:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse. No specific treatment is necessary, since this material is not likely to be hazardous.

**In Case of Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid. No specific treatment is necessary, since this material is not likely to be hazardous. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

**In Case of Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. No specific treatment is necessary, since this material is expected to be non-hazardous. Call a poison control center.

**Note to Physician:** Persons with impaired kidney function may be more susceptible to the effects of this substance.

### SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: 62.00 C Method Used: Estimate

#### Explosive Limits:

**Autoignition Pt:** 238.00 C

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Not available. Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Material will not burn. Will burn if involved in a fire. Combustible liquid and vapor.

#### Flammable Properties and Hazards:

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.



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### SECTION 7: HANDLING AND STORAGE

**Precautions To Be Taken in Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. No special handling procedures are required. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

**Precautions To Be Taken in Storing:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. No special storage requirements. Keep away from sources of ignition. Store in a cool, dry place.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
57-55-6	Propylene glycol {1,2-Propanediol }			
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	PEL: 50 ppm	TLV: 20 ppm	

**Respiratory Equipment (Specify Type):** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Respirator protection is not normally required. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Eye protection is not normally required.

**Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure. Protective garments not normally required.

**Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure. Protective garments not normally required.

**Engineering Controls (Ventilation etc.):** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. There are no special ventilation requirements. Use only under a chemical fume hood.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Physical States:** ☐ Gas ☒ Liquid ☐ Solid

**Appearance and Odor:** Clear, blue liquid. Butyl-like odor.

**Melting Point:** -70.00 C

**Boiling Point:** 100.00 C - 171.00 C

**Autoignition Pt:** 238.00 C

**Flash Pt:** 62.00 C Method Used: Estimate

**Explosive Limits:** LEL: UEL:

**Specific Gravity (Water = 1):**

**Vapor Pressure (vs. Air or mm Hg):**

**Vapor Density (vs. Air = 1):**

**Evaporation Rate:**

**Solubility in Water:**

**Percent Volatile:**

### SECTION 10: STABILITY AND REACTIVITY

**Stability:** Unstable ☐ Stable ☒

**Conditions To Avoid - Instability:** Excess heat, moist air, Incompatible materials, ignition sources.

**Incompatibility – Materials To Avoid:** Strong acids. Aluminum.

**Hazardous Decomposition Or Byproducts:** Carbon monoxide, Carbon dioxide.

**Possibility of Hazardous Reactions:** Will occur ☐ Will not occur ☒

**Conditions To Avoid -Hazardous Reactions:**

### SECTION 11: TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: No information found. Teratogenicity: No information available.

**Carcinogenicity/Other Information:** CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 111-76-2: ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans. California: Not listed. NTP: Not listed. IARC: Not listed.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
57-55-6	Propylene glycol {1,2-Propanediol }	n.a.	n.a.	n.a.	n.a.
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	n.a.	3	A3	n.a.



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## SECTION 12: ECOLOGICAL INFORMATION

**General Ecological Information:** Ecotoxicity: Water flea Daphnia: EC50 10000 mg/L; 48 Hr Unspecified, Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox test Fish: Goldfish: LC50 5000 mg/L; 24 Hr; Unspecified Fish: Guppy: LC50 1000 mg/L; 48 Hr; Unspecified If released to water, 1,2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur. Significant leaching in soil can be predicted. Environmental: If released to the atmosphere, it is degraded rapidly by reaction with photochemically produced hydroxyl radicals (typical half-life of 32 hr). Physical removal from air by rainfall is possible. Physical: No information available. Other: No information available. TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low. Physical: No information found. Other: An estimated BCF value of 2.5, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.

## SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

**LAND TRANSPORT (US DOT): DOT Proper Shipping Name:** Not regulated.

**DOT Hazard Class:** NA None

**UN/NA Number:** None

**LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** Not Regulated. Not regulated.

## SECTION 15: REGULATORY INFORMATION

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
57-55-6	Propylene glycol {1,2-Propanediol }	No	No	No
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}	No	No	Yes-Cat. N230

**CAS #**      **Hazardous Components (Chemical Name)**

57-55-6      Propylene glycol {1,2-Propanediol }

111-76-2      Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB}

**Other US EPA or State Lists**

CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

CAA HAP, ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

## SECTION 16: OTHER INFORMATION

**Revision Date:** 05/01/2016

**Preparer Name:** Regulatory Affairs

**Additional Information About This Product:**

**Company Policy or Disclaimer:** The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.