

# SAFETY DATA SHEET

PRODUCT: **Wik Chafing Fuel**

April 1, 2021

**MANUFACTURER** Kelmin Products, Inc  
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**PRODUCT CODES** W224 W424 W424T W624

**PRODUCT DESCRIPTION** A metal can, cap & innerseal with a fiberglass wick using the Chemical **Diethylene Glycol** as a fuel source.  
Minimum fuel per can 2 fluid ounces.  
Maximum fuel per can 10 fluid ounces.

## 1. IDENTIFICATION

CAN, CAP, INNERSEAL AND FIBERGLASS WICK ARE INERT INGREDIENTS. THE BALANCE OF THIS MATERIAL SAFETY DATA SHEET ONLY PERTAINS TO THE CHEMICAL INGREDIENT, **DIETHYLENE GLYCOL**.

**CHEMICAL FAMILY** Glycol

**CHEMICAL NAME** Diethylene Glycol  
(Synonyms: DEG 2.2' Dihydroxyethyl Ether, Ethanol, 2.2' oxybis; Diglycol; Ethylene Diglycol)

**CAS NUMBER** 111-46-6

**NFPA CODES** Flammability 1 0=None  
Reactivity 0 4=Extreme  
Health Toxicity 1

**Poison Control Center** **1.800.222.1222**

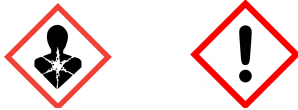
## 2. HAZARDS IDENTIFICATION

**Classification of substance or mixture:** This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910. 1200.

**Hazard Class:**

**Acute toxicity (oral)** **Category 4**  
**Specific target organ toxicity-repeat exposure** **Category 2**

**Label elements**  
**Hazard Symbols:**



**Signal Word: Warning**

**Hazards of product:**

**Harmful if swallowed.**

**May cause damage to organs through prolonged or repeated exposure if swallowed.**

**Precautionary Statements:**

**Prevention:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling.

**Response:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Get medical advice/attention if you feel unwell.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS:

<u>COMPONENT</u>	<u>CAS#</u>	<u>%</u>
Diethylene Glycol	111-46-6	99-100
Ethylene Glycol	107-21-1	0-1

## 4. FIRST AID

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

**Eye Contact**

Flush eye with large amount of water for at least 15 minutes while holding eyelid open. Remove contact lenses if worn. Get medical attention immediately.

**Skin Contact**

Remove contaminated clothing and wash affected skin area with soap and water. Do not use contaminated clothing until thoroughly washed with soap and water.

**Ingestion**

Do not induce vomiting. Get medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

Headache, Dizziness, Cramp, Nausea, Gastric or intestinal disorders.

**Danger:** Danger of convulsion

**Indication of any immediate medical attention and special treatment need:**

Medical supervision for at least 48 hours.

## 5. FIRE FIGHTING MEASURES

**Special Fire Fighting Procedures** Material will not burn unless preheated. Do not enter a confined fire space where cases of this product are stored without full bunker gear, including a positive pressure self-contained breathing apparatus (SCBA). Cool fire exposed containers with water.

**Hazardous combustion products** Carbon monoxide, Carbon dioxide, Smoke.

**Extinguishing Media:**

**Suitable extinguishing media:**

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

**Unsuitable extinguishing media:**

Do not use water jet.

## 6. ACCIDENTAL RELEASE MEASURES

**Environmental precautions** Ensure adequate ventilation.  
Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains  
Inform respective authorities.

**Methods and materials for containment and cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

**General Handling:** Avoid contact with eyes, skin, clothing. Do not swallow. Wash thoroughly after handling. Smoking, eating and drinking should be prohibited in the application area.

**Storage incompatibilities:** Store away from food stuffs. Do not store together with oxidizing and acidic materials. Do not store together with alkalis (caustic solutions).

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### Exposure Limits

Component	List	Type	Value
Diethylene glycol	AIHA WEEL	TWA	10mg/m <sup>3</sup>

### Respiratory Protection

None expected to be needed at normal room temperatures.

### Eye Protection

None expected to be needed when handled according to directions on the can.

### Skin Protection

Wash areas of contact with the liquid with soap and water.

### Hygiene measures

When using do not eat or drink

When using do not smoke

Wash hands before breaks and at the end of workday.

### Ventilation

Use local exhaust ventilation, or other engineering controls

To maintain airborne levels below exposure limit requirements or guidelines. General ventilation should be sufficient for most operations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Viscous
<b>Color</b>	Colorless
<b>Odor</b>	Sweet, very faint
<b>Odor Threshold</b>	No data available
<b>ph</b>	No data available
<b>Freezing Point (Freezing Point)</b>	-6.5 °C (20.3 °F)
<b>Boiling Point (Boiling Point/boiling range)</b>	245 °C (471 °F)
<b>Flash Point</b>	138 °C (280 °F)
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Burning Rate</b>	No data available
<b>Upper explosion limit</b>	12.3 %(v)
<b>Lower explosion limit</b>	2.0 %(v)
<b>Vapor pressure</b>	0.002 mmHg @ 20 °C (68 °F)
<b>Relative vapor density</b>	3.65
<b>Relative density</b>	1.118
<b>Bulk density</b>	No data available
<b>Water Solubility</b>	No data available
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-Octanol/water</b>	log <sub>10</sub> K <sub>ow</sub> Estimated -1.98
<b>Auto-ignition temperature</b>	229 °C (444 °F)
<b>Thermal decomposition</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	No dangerous reaction known under conditions of Normal use.
<b>Chemical stability</b>	Stable under normal conditions
<b>Possibility of hazardous Reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Exposure to elevated temperatures can cause product To decompose. Generation of gas during decomposition can cause pressure in closed system.
<b>Incompatible materials</b>	Strong acids Strong bases Strong oxidizing agents
<b>Hazardous decomposition</b>	May form Aldehydes Alcohols Ethers Carbon dioxide and carbon monoxide

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity Ingestion:** Oral toxicity is expected to be moderate in humans due to Diethylene glycol. Animals show a lower degree of toxicity. May cause nausea and vomiting. May cause abdominal discomfort or diarrhea. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure.

Estimated. Lethal Dose, Human, adult 2 ounces  
LD50, rat, male, 19,600 mg/kg.

**Aspiration hazard:** Bases on physical properties, not likely to be an aspiration hazard.

**Dermal:** Prolonged skin contact is unlikely to result in absorption of harmful amounts. Repeated skin exposure to large quantities may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

LD50, rabbit 11,890 mg/kg

**Inhalation:** At room temperature, exposure to vapor is minimal due to low volatility. With good ventilation, single exposure is not expected to cause adverse effects. If material is heated or areas are poorly ventilated, vapor/mist may accumulate and cause respiratory irritation and symptoms such as headache and nausea.

The LC50 value is greater than the Maximum Attainable Concentration. LC50 4 h, Aerosol, rat > 4.6 mg/l

No deaths occurred at this concentration.

**Eye damage/eye irritation:** May cause slight temporary eye irritation. Corneal injury is unlikely.

**Skin corrosion/irritation:** Prolonged contact is essentially nonirritating to skin.

### **Sensitization**

**Skin:** Did not cause allergic skin reactions when tested in humans. Did not cause allergic skin reactions when tested in guinea pigs.

**Respiratory:** No relevant data found.

**Repeated Dose Toxicity:** In humans, effects have been reported on the following organs: Kidney. Gastrointestinal tract. In humans, symptoms may include: Headache. Nausea and/or vomiting. Abdominal discomfort. In animals, effects have been reported on the following organs: Liver.

**Chronic Toxicity and Carcinogenicity:** Diethylene glycol has been tested for carcinogenicity in animal studies and is not believed to pose a carcinogenic risk to man.

**Developmental Toxicity:** Diethylene glycol has caused toxicity to the fetus and some birth defects at maternally toxic, high doses in animals. Other animal studies have not reproduced birth defects even at much higher doses that caused severe maternal toxicity.

**Reproductive Toxicity:** Diethylene glycol did not interfere with reproduction in animal studies except at very high doses.

**Genetic Toxicology:** In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## 12. ECOLOGICAL INFORMATION

### Toxicity:

Material is practically non toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50>100mg/l in the most sensitive species tested.)

### Fish Acute & Prolonged Toxicity:

LC50, Pimephales promelas (fathead minnow), flow-through test 96 h: 75,200 mg/l

### Aquatic Invertebrate Acute Toxicity:

EC50, Daphnia magna (water flea), static test, 24 h, immobilization:> 10,000 mg/l

### Toxicity to Micro-organisms:

EC50, OECD 209 Test: activated sludge, Respiration inhibition, 3 h:> 1,000 mg/l

### Persistence and Degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% biodegradation in OECD test(s) for inherent biodegradability).

**OECD Biodegradation test:** Based on analogy.

Biodegradation	Exposure Time	Method	10 Day Window
90 – 100%	20 d	OECD 301A Test	pass
82 – 98%	28 d	OECD 302C Test	Not applicable

**Theoretical Oxygen Demand:** 1.51 mg/mg

### Bioaccumulative potential

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

Partition coefficient, n-octanol/water (log pow): 1.98 Estimated.

Bioconcentration Factor (BCF): 100: Fish: Measured.

### Mobility in soil

**Mobility in soil:** Given its very low Henry's constant, volatilization from natural bodies of water or Moist soil is not expected to be an important fate process. Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient, soil organic carbon/water (Koc):** < 1 Estimated.

**Henry's Law Constant. (H):** 7.96E-10 atm\*m3/mole: 25 \*C Estimated.

**Distribution in Environment:** Mackay Level 1 Fugacity Model:

Air	Water	Biota	Soil	Sediment
0,75%	99.25%	0%	0%	0%

### Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

### Other adverse effects:

This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete.

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OR PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal.



## 14. TRANSPORTATION INFORMATION

<b>Shipping Name</b>	Diethylene Glycol
<b>Hazard Class</b>	Non – Hazardous Liquid
<b>Un Number</b>	N/A
<b>Proper Shipping Name</b>	Not Regulated
<b>Hazard Label</b>	N/A

## 15. REGULATORY INFORMATION

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)  
This product contains **no** chemicals subject to the reporting requirements of CERCLA.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III  
This product contains **no** chemicals subject to the reporting requirements of SARA Title III, Section 311, 312

Subpart Z, OSHA  
This product contains **no** chemicals that are on the list of chemicals that have substance-specific requirements.

This product is considered hazardous under the OSHA Hazardous Communication Standard (29 CFR 19/0. 1200)

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List And/Or Pennsylvania Environmental Hazardous Substance List: The Following Product Components Are Cited In The Pennsylvania Hazardous Substance List And/Or The Pennsylvania Environmental Substance List, And Are Present At Levels Which Require Reporting.

Component	CAS#	Amount
Diethylene Glycol	111-46-6	> 99.0 A

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act Of 1986)  
Warning: This Product Contains A Chemical (S) Known To The State Of California To Cause Cancer.

Component	CAS#	Amount
1,4 - Dioxane	123-91-1	<= 0.5 PPM

California Proposition 65 ( Safe Drinking Water And Toxic Enforcement Act Of 1986)  
Warning: This Product Contains A Chemical (S) Known To The State Of California To Cause Birth Defects Or Other Reproductive Harm.

Component	CAS#	Amount
Ethylene Glycol Monomethyl Ether	109-86-4	<= 0.05 PPM

CEPA-Domestic Substance List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List or are not required to be listed.

## 16. OTHER INFORMATION

This product is to be used as specified on the box and can only. Keep out of the reach of children. Do not take internally. Never leave an open flame unattended.

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