



**SECTION 1: IDENTIFICATION**

<b>1.1 Product Identifier</b>	Trade Name – Dine-a-Heat®, Diablo®
<b>1.2 Common Names or Synonyms</b>	Chafing fuel
<b>1.3 Recommended use of the chemical &amp; restrictions on use</b>	Food Warming Fuel
<b>1.4 Supplier's name, address &amp; telephone</b>	Dine-a-Heat® Le-Jo Enterprises, Inc. 765 Pike Springs Road Phoenixville, PA 19460 484-921-9000 www.lejo.com
<b>1.5 Supplier's emergency phone number</b>	CHEMTREC 800-424-9300 – NORTH AMERICA CHEMTREC 703-527-3887 - WORLDWIDE



**SECTION 2: HAZARD(S) IDENTIFICATION**

<b>2.1 Hazard classification of the substance/mixture</b>	Acute Toxicity				
<b>2.2 Signal word and ghs label elements</b>	<table border="0"> <tr> <td style="text-align: center;"><b>Word</b></td> <td style="text-align: center;"><b>Symbol</b></td> </tr> <tr> <td style="text-align: center;">Warning</td> <td style="text-align: center;"></td> </tr> </table>	<b>Word</b>	<b>Symbol</b>	Warning	
<b>Word</b>	<b>Symbol</b>				
Warning					
<b>2.3 Hazard statements</b>	H302: Harmful if swallowed Precautionary statements & responses:				
<b>2.4 Other hazards/statements</b>	<ul style="list-style-type: none"> <li>• P101: If medical advice is needed, have product container or label at hand</li> <li>• P102: Keep out of reach of children</li> <li>• P103: Read label before use</li> <li>• P301 + P312: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician</li> </ul>				

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Information of chemical ingredients; trade secret claims**

<p><b>ethanediol</b></p> <p><b>CAS</b> 107-21-1</p> <p><b>EINECS</b> 203-473-3</p> <p><b>Index #</b> 603-027-00-1</p> <p><b>Hazard</b> Xn R22 </p> <p><b>Toxicity</b> Acute Tox. 4, H302 </p> <p><b>Weight</b> 25-75 %</p>	<p><b>2,2' - oxybisethanol</b></p> <p><b>CAS</b> 111-46-6</p> <p><b>EINECS</b> 203-473-3</p> <p><b>Index #</b> 603-140-00-6</p> <p><b>Hazard</b> Xn R22 </p> <p><b>Toxicity</b> Acute Tox. 4, H302 </p> <p><b>Weight</b> 25-75 %</p>
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**SECTION 4: FIRST AID MEASURES**

<b>4.1 Important symptoms/effects, acute &amp; delayed</b>	SYMPTOMS OF POISONING MAY EVEN OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT – Symptoms or effects, both acute and delayed: Nausea, Cramp, Thirst
<b>4.2 Required Treatments</b>	



<p><b>Eye contact</b></p> <p><b>Skin contact</b></p> <p><b>Inhalation</b></p> <p><b>Ingestion</b></p>	<p>Remove contact lenses if worn, flush open eye for several minutes, if symptoms persist, consult a doctor</p> <p>Clean with water &amp; soap, if skin irritation continues, consult a doctor</p> <p>Supply fresh air, consult a doctor in case of complaints</p> <p>Call for medical help immediately, rinse out mouth and then drink plenty of water, do not induce vomiting</p>
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**SECTION 5: FIREFIGHTING MEASURES**

<p><b>5.1 Suitable (&amp; unsuitable) extinguishing methods</b></p> <p><b>5.2 Specific hazards arising from the chemical</b></p> <p><b>5.3 Special protective equipment &amp; precautions for firefighters</b></p>	<p>Use fire extinguishing methods suitable for surrounding conditions</p> <ul style="list-style-type: none"> <li>• In case of fire, the following can be released: Carbon monoxide (CO)</li> <li>• Under certain fire conditions, traces of other toxic gases cannot be excluded</li> <li>• In the event of fire, wear self-contained breathing apparatus</li> <li>• Wear fully protective suit</li> <li>• Cool endangered receptacles with water spray</li> </ul>
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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

<p><b>6.1 Personal &amp; environmental precautions, protective equipment &amp; emergency procedures</b></p> <p><b>6.2 Methods &amp; materials for containment &amp; cleanup</b></p>	<p><b>Personal:</b></p> <ul style="list-style-type: none"> <li>• Ensure adequate ventilation</li> <li>• Keep away from ignition sources</li> <li>• Wear protective clothing</li> </ul> <p><b>Environmental:</b></p> <ul style="list-style-type: none"> <li>• Do not allow to enter sewers/surface or ground water</li> <li>• Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as water according to item 13</li> <li>• See section 7 for information on safe handling</li> <li>• See section 8 for information on personal protection equipment</li> <li>• See section 13 for information on disposal information</li> </ul>
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**SECTION 7: HANDLING & STORAGE**

<p><b>7.1 Safe handling &amp; storage precautions, including incompatibilities</b></p>	<p><b>Safe handling advice</b></p> <p><b>Storage/Transport pressure</b></p>	<ul style="list-style-type: none"> <li>• Use only in well ventilated areas</li> <li>• Keep ignition sources away – do not smoke</li> <li>• Store in cool, dry place</li> <li>• Store in tightly closed receptacles</li> <li>• Avoid storage near extreme heat, ignition sources or open flame</li> </ul>
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- Protect from humidity & water
- Store away from food & food products, store away from oxidizing agents
- Do not store together with acids
- Protect from heat and direct sunlight

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**107-21-1 ethanediol**

**8.1 Control parameters based on OSHA's permissible exposure limits (PEL's) & OSHA's threshold limit values (TLV's)**

IOELV (EU)	Short-term value: 104 mg/m <sup>3</sup> , 40 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Skin
TLV (USA)	Short-term value: C 100 mg/m <sup>3</sup> H
EL (Canada)	Short-term value: C 100* 20** mg/m <sup>3</sup> , C 50*** ppm Long-term value: 10** mg/m <sup>3</sup> *Aerosol; **Particulate; ***Vapour

**111-46-6 2,2'-oxybisethanol**

WEEL (USA) 10 mg/m<sup>3</sup>

**8.2 Appropriate engineering controls**

N/A

**General**

- Keep away from food & food products, beverages and feed
- Wash hands before breaks and at the end of work
- Avoid contact with eyes and skin

**Eyes**

Safety Glasses



**Body**

Light weight protective clothing

**Respiratory**

Not required under normal conditions of use, for spills, respiratory protection may be advisable

**8.3 Personal protection measures, protective equipment recommendations & exposure controls**

**Hands**

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Glove Material** - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.



- **Penetration time of glove material** - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact gloves made of the following materials are suitable:** Rubber gloves

**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

**9.1 Physical & chemical properties**

<b>Form</b>	Liquid
<b>Color</b>	Colorless
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not determined
<b>pH-Value</b>	Not determined
<b>Melting point/Melting range</b>	undetermined
<b>Boiling point/Boiling range</b>	387 °F / 197 °C
<b>Flash point</b>	232 °F / 111 °C
<b>Flammability (solid, gaseous)</b>	Not applicable
<b>Ignition temperature</b>	>392 °F / >200 °C
<b>Decomposition temperature</b>	Not determined
<b>Self-igniting</b>	Product is not self-igniting
<b>Danger of explosion</b>	Product does not present an explosion hazard
<b>Explosion limits – Lower</b>	0,7 Vol %
<b>Explosion limits - Upper</b>	53,0 Vol %
<b>Vapor pressure at 20 °C</b>	0,1 hPa
<b>Density at 20 °C</b>	1,12 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined
<b>Vapor density</b>	Not determined
<b>Evaporation rate</b>	Not determined
<b>Solubility in/Miscibility with water</b>	Partly soluble
<b>Partition coefficient (n-octanol/water)</b>	Not determined
<b>Viscosity – Dynamic</b>	Not determined
<b>Viscosity - Kinematic</b>	Not determined

**SECTION 10: STABILITY & REACTIVITY**

**10.1 Lists chemical stability & possibility of hazardous reactions**

**10.2 Conditions to avoid**

**10.3 Incompatible materials**

**10.4 Hazardous decomposition products**

- No decomposition if stored & applied as directed
  - Reacts with oxidizing agents
  - Reacts with strong acids & alkali
  - Danger of receptacles bursting because of high vapor pressure when heated
  - Toxic fumes may be released if heated above the decomposition point
  - Keep away from heat & sources of ignition
  - Do not smoke
  - Keep away from oxidizing agents
- No further information
- Carbon monoxide & carbon dioxide



**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Routes of exposure; related symptoms, acute & chronic effects, numeral measures of toxicity**

**Acute toxicity**

**LD/LC50 values relevant for classification**

	<b>107-21-1 ethanediol</b>		<b>111-46-6 2,2'-oxybisethanol</b>		
<b>Oral</b>	<b>LD50</b>	5840 mg/kg (rat)	<b>Oral</b>	<b>LD50</b>	12565 mg/kg (rat)
<b>Dermal</b>	<b>LD50</b>	9530 mg/kg (rabbit)	<b>Dermal</b>	<b>LD50</b>	11890 mg/kg (rabbit)

**Primary irritant effect**

**Skin** None

**Eyes** None

**Sensitization** No effects known

**Additional toxicological information**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Harmful Vapors have narcotic effect.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Ecological Information**

**Aquatic toxicity** No further relevant information available

**Biodegradation** Biodegradable

**Bioaccumulation** Does not accumulate in organisms

**Mobility in soil** No further relevant information available

**Ecotoxicological effects** Due to mechanical actions of the product (e.g. agglutinations) damages may occur

**Additional information** This statement was deduced from the properties of the single components. Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely. Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage System.

**Other adverse effects** No further relevant information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Disposal Considerations**

**Waste Code** Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

**Disposal methods** Dispose of only in accordance with local, state, and federal regulations

**Un-cleaned packaging** Dispose of only in accordance with local, state, and federal regulations. Clean with water & if necessary a cleansing agent

**SECTION 14: TRANSPORT INFORMATION**

**14.1 Transport Information**

**UN-Number - DOT, ADR, ADN, IMDG, IATA** N/A

**UN proper shipping name - DOT, ADR, ADN, IMDG, IATA** N/A



<b>Transport hazard class(es) - DOT, ADR, ADN, IMDG, IATA Class</b>	N/A
<b>Packing group - DOT, ADR, IMDG, IATA</b>	N/A
<b>Environmental hazards - Marine pollutant</b>	No
<b>Special precautions for user</b>	N/A
<b>Transport in bulk according to Annex II of - MARPOL73/78 and the IBC Code</b>	N/A
<b>UN "Model Regulation"</b>	-----

**SECTION 15: REGULATORY INFORMATION**

**15.1 US Federal Regulations**

**Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 (Specific toxic chemical listings):**

107-21-1 ethanediol

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenic Categories**

**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

**TLV (Threshold Limit Value established by ACGIH)**

107-21-1 ethanedio

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**Canada**

**Canadian Domestic Substances List (DSL)**

All ingredients are listed.

**Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

**Canadian Ingredient Disclosure list (limit 1%)**

107-21-1 ethanediol

**SECTION 16: OTHER INFORMATION**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Relevant phrases**

H302 Harmful if swallowed.

R22 Harmful if swallowed.

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the



## Safety Data Sheet according to Globally Harmonized System (GHS)



International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
ACGIH: American Conference of Governmental Industrial Hygienists  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
WHMIS: Workplace Hazardous Materials Information System (Canada)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent