




SECTION 1: IDENTIFICATION













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



SECTION 2: HAZARD(S) IDENTIFICATION

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Information of chemical ingredients; trade secret claims	ethanediol	2,2' - oxybisethanol																		
3.2 CAS number, EC number, etc.	<table border="0"> <tr> <td>CAS</td> <td>107-21-1</td> <td>111-46-6</td> </tr> <tr> <td>EINECS</td> <td>203-473-3</td> <td>203-473-3</td> </tr> <tr> <td>Index #</td> <td>603-027-00-1</td> <td>603-140-00-6</td> </tr> <tr> <td>Hazard</td> <td>Xn R22 </td> <td>Xn R22 </td> </tr> <tr> <td>Toxicity</td> <td>Acute Tox.4, H302 </td> <td>Acute Tox.4, H302 </td> </tr> <tr> <td>Weight</td> <td>25-75 %</td> <td>25-75 %</td> </tr> </table>	CAS	107-21-1	111-46-6	EINECS	203-473-3	203-473-3	Index #	603-027-00-1	603-140-00-6	Hazard	Xn R22 	Xn R22 	Toxicity	Acute Tox.4, H302 	Acute Tox.4, H302 	Weight	25-75 %	25-75 %	
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SECTION 4: FIRST AID MEASURES

4.1 Important symptoms/effects, acute & delayed	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
4.2 Required Treatments	Remove contact lenses if worn, flush open eye for several minutes, if symptoms persist, consult a doctor
	Eye contact

4.2 Required Treatments (cont.)	Skin contact	Clean with water & soap, if skin irritation continues, consult a doctor
	Inhalation	Supply fresh air, consult a doctor in case of complaints
	Ingestion	Call for medical help immediately, rinse out mouth and then drink plenty of water, do not induce vomiting
SECTION 5: FIREFIGHTING MEASURES		
5.1 Suitable (& unsuitable) extinguishing methods	Use fire extinguishing methods suitable for surrounding conditions:	
5.2 Specific hazards arising from the chemical	<ul style="list-style-type: none"> • In case of fire, the following can be released: Carbon monoxide (CO) • Under certain fire conditions, traces of other toxic gases cannot be excluded • In the event of fire, wear self-contained breathing apparatus • Wear fully protective suit • Cool endangered receptacles with water spray 	
5.3 Special protective equipment & precautions for firefighters		
SECTION 6: ACCIDENTAL RELEASE MEASURES		
6.1 Personal & environmental precautions, protective equipment & emergency procedures	<u>Personal:</u>	<ul style="list-style-type: none"> • Ensure adequate ventilation • Keep away from ignition sources • Wear protective clothing
6.2 Methods & materials for containment & cleanup	<u>Environmental:</u>	<ul style="list-style-type: none"> • Do not allow to enter sewers/surface or ground water • Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as water according to item 13 • See section 7 for information on safe handling • See section 8 for information on person protection equipment • See section 13 for information on disposal information
SECTION 7: HANDLING & STORAGE		
7.1 Safe handling & storage precautions, including incompatibilities	Safe handling advice	<ul style="list-style-type: none"> • Use only in well ventilated areas • Keep ignition sources away – do not smoke
	Storage/Transport pressure	<ul style="list-style-type: none"> • Store in a cool, dry place • Store in tightly closed receptacles • Avoid storage near extreme heat, ignition sources or open flame

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

8.2 Appropriate engineering controls

WEEL (USA)
N/A

111-46-6 2,2'-oxybisethanol

10 mg/m³

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 Goggles



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

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.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical & chemical properties

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

SECTION 10: STABILITY & REACTIVITY

10.1 Lists chemical stability & possibility of hazardous reactions

- 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

10.2 Conditions to avoid

- Do not smoke
- Keep away from oxidizing agents

10.3 Incompatible materials

No further information

10.4 Hazardous decomposition products

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

107-21-1 ethanediol

111-46-6 2,2'-oxybisethanol

Safety Data Sheet according to Globally Harmonized System (GHS)

Oral	LD50	5840 mg/kg (rat)	Oral	LD50	12565 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)	Dermal	LD50	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
Transport hazard class(es) - DOT, ADR, ADN, IMDG, IATA Class	N/A
Packing group - DOT, ADR, IMDG, IATA	N/A

Environmental hazards - Marine pollutant	No
Special precautions for user	N/A
Transport in bulk according to Annex II of - MARPOL73/78 and the IBC Code	N/A
UN "Model Regulation"	-----

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

Safety Data Sheet according to Globally Harmonized System (GHS)

Abbreviations and acronyms:

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