SECTION 1: IDENTIFICATION

1.1 Product Identifier	Trade Name – Dine-a-Heat®, Methanol Gel
1.2 Common Names or Synonyms	Gel fuel
1.3 Recommended use of the chemical & restrictions on use	Food Warming Fuel
1.4 Supplier's name, address & telephone	Dine-a-Heat® 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 label elements

Word	Symbol
Flame H228 Flamable Solid	
Skull & Crossbones H301 Toxic if swallowed H311 Toxic in contact with skin H331 Toxic if inhaled	
Health Hazard H370 Causes damage to organs	

WHMIS - Symbols

B4 - Flammable solid
D1A - Very toxic material causing immediate and serious toxic effects
D2A - Very toxic material causing other toxic effects

NFPA ratings (scale 0-4)

Health = 2
Fire = 3
Reactivity = 0

HMIS ratings (scale 0-4)

Health = *2
Fire = 3
Reactivity = 0

2.3 Hazard statements

See above

2.4 Other hazards/statements

Precautionary statements & responses:

- 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
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P361: Remove/Take off immediately all contaminated clothing
- P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P370 + P378 In case of fire: Use for extinction: CO2, powder or water spray
- P403 + P233: Store in a well-ventilated place, keep container tightly closed

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Information of chemical ingredients; trade secret claims

methanol

CAS	67-56-1
EINECS	200-659-6
Index #	603-001-00-X
Hazard	 T R23/24/25-39/23/24/25;  F R11
	 Flam. Liq. 2, H225
Toxicity	 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331
	 STOT SE 1, H370
Weight	50-100 %

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: thirst, headache, dizziness, disorientation, nausea, acidosis, unconsciousness

4.2 Required Treatments	**Eye contact**	Remove contact lenses if worn, flush open eye for several minutes, consult a doctor
	Skin contact	Immediately clean with water & soap, rinse thoroughly, if skin irritation continues, consult a doctor
	Inhalation	Supply fresh air, consult a doctor. In case of unconsciousness, place patient stably in side position for transportation
	Ingestion	Call for medical help immediately, rinse out mouth and then drink plenty of water, do not induce vomiting
	Hazards	Danger of circulatory collapse, convulsion, impaired breathing
Indication of Immediate Medical Attention & Special Treatment		Monitor circulation, possible shock treatment If necessary oxygen respirations treatment

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable (& unsuitable) extinguishing methods	Suitable: $C0_2$, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
5.2 Specific hazards arising from the chemical	No further relevant information available
5.3 Special protective equipment & precautions for firefighters	• In the event of fire, wear self-contained breathing apparatus • Wear fully protective suit • Cool endangered receptacles with water spray

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal & environmental precautions, protective equipment & emergency procedures	**Personal:** • Ensure adequate ventilation • Keep away from ignition sources • Wear protective equipment, keep unprotected persons away **Environmental:** • Do not allow to enter sewers/surface or ground water; in case above inform respective authorities • Dispose contaminated material as water according to item 13 – Ensure adequate ventilation
6.2 Methods & materials for containment & cleanup	• See section 7 for information on sage handling • See section 8 for information on personal protection equipment • See section 13 for information on disposal information

SECTION 7: HANDLING & STORAGE

7.1 Safe handling & storage precautions,	**Safe handling advice**	• Use only in well ventilated areas • Keep ignition sources away – do not smoke

including incompatibilities		• Protect against electrostatic charges • Thorough dusting • Open and handle receptacle with care • Store in cool, dry place
	Storage/Transport pressure	• Store in tightly closed receptacles • Avoid storage near extreme heat, ignition sources or open flame • Store away from oxidizing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

		107-21-1 ethanediol
8.1 Control parameters based on OSHA'a permissible exposure limits (PEL's) & OSHA's threshold limit values (TLV's)	IOELV (EU)	260 mg/m³, 200 ppm Skin
	PEL (USA)	260 mg/m³, 200 ppm
	REL (USA)	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
	TLV (USA)	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
	EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin
	EV (Canada)	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260mg/m³, 200 ppm Skin
8.2 Appropriate engineering controls	N/A	
8.3 Personal protection measures, protective equipment recommendations & exposure controls	**General**	• Keep away from food & food products, beverages and feed • Wash hands before breaks and at the end of work • Immediately remove all soiled and contaminated clothing • Store protective clothing separately • Avoid contact with eyes and skin
	Eyes	 Safety Glasses
	Body	Light weight protective clothing
	Respiratory	In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device
	Hands	 • Protective Gloves • 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

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical & chemical properties

Form	Solid material
Color	blue
Odor	Alcohol-like
Odor threshold	Not determined
pH-Value at 20°C	7
Melting point/Melting range	undetermined
Boiling point/Boiling range	78 °C
Flash point	11 °C
Flammability (solid, gaseous)	Highly flammable
Ignition temperature	455 °C
Decomposition temperature	Not determined
Self-igniting	Product is not self-igniting
Danger of explosion	Product is not explosive. However, formation of explosive air/vapor mixtures are possible
Explosion limits – Lower	5,5 Vol %
Explosion limits - Upper	44,0 Vol %
Vapor pressure at 20 °C	128 hPa
Density at 20 °C	0.85 g/cm³
Relative density	Not determined
Vapor density	N/A
Evaporation rate	N/A
Solubility in/Miscibility with water	Soluble
Partition coefficient (n-octanol/water)	Not determined
Viscosity – Dynamic	Not determined
Viscosity - Kinematic	Not determined
Solvent content – Organic solvents	72.0%
Water	2.0%

SECTION 10: STABILITY & REACTIVITY

10.1 Lists chemical stability & possibility of hazardous reactions	• No decomposition if stored & applied as directed • Used empty containers may contain product gases which form explosive mixtures with air
10.2 Conditions to avoid	No further relevant information
10.3 Incompatible materials	No further relevant 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

Oral	**LD50**	5628 mg/kg (rat)
Dermal	**LD50**	15800 mg/kg (rabbit)

Primary irritant effect

Skin	None
Eyes	None
Sensitization	No effects known
Additional toxicological information	• Vapors have narcotic effect. • Inhalation of concentrated vapors as well as oral intake will lead to anesthesia-like conditions and headache, dizziness, etc. • 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 - Toxic

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
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.
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	UN1325
UN-Number - ADR, IMDG, IATA	UN2926

UN proper shipping name

Limited Quantity for packages less than 30 kg (66 lb.) and inner packagings less than 1.0 kg (2.2 pounds)

DOT FLAMMABLE SOLID, ORGANIC, N.O.S. – (METHANOL)

ADR 2926 FLAMMABLE SOLID, ORGANIC, N.O.S. – (METHANOL)

IMDG, IATA FLAMMABLE SOLID, ORGANIC, N.O.S. – (METHANOL)

Transport hazard class(es)

Label	Class
DOT  **Label 4.1**	4.1 Flammable solids, self-reactive substances and solid desensitized explosives
ADR  **Label 4.1 & 6.1**	4.1 (FT1) Flammable solids, self-reactive substances and solid desensitized explosives.
IMDG, IATA  **Label 4.1 & 6.1**	4.1 Flammable solids, self-reactive substances and solid desensitized explosives.

Packing group - DOT, ADR, IMDG, IATA	II
Environmental hazards - Marine pollutant	No
Special precautions for user	Warning: Flammable solids, self-reactive substances & solid desensitized explosives.
Danger code (Kemler)	46
EMS Number	F-A-, S-G
Transport in bulk according to Annex II of - MARPOL73/78 and the IBC Code	N/A

Transport/Additional Information

ADR	
Limited Quantities (LQ)	1 kg
Transport Category	2
Tunnel restriction code	D/E
UN "Model Regulation"	UN2926, FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (METHANOL), 4.1 (6.1), II

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):

67-56-1 methanol

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:
67-56-1 methanol
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)
None of the ingredients is listed.
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%)
67-56-1 methanol

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:

H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H370	Causes damage to organs
R11	Highly flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises 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)
LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent