



# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date 11/16/2015

Reviewed on 11/16/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Envirofuel, Envirogel, Ecogel, Greengel
- **Article number:** E200 and E400
- **Recommended use and restriction on use**
- **Recommended use:** Fuel
- **Restrictions on use:** Contact manufacturer
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Leolight inc  
31 - 10 Planchet Rd  
Concord, Ontario  
1-800-267-6428  
info@leolight.net
- **Information department:** Product Safety Department
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Solids - Category 1 H228 Flammable solid.



GHS07

Eye Irritation - Category 2A H319 Causes serious eye irritation.

- **Additional information:**

0 % of the mixture consists of component(s) of unknown toxicity.

There are no other hazards not otherwise classified that have been identified.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS02 GHS07

- **Signal word:** Danger

- **Hazard statements:**

H228 Flammable solid.

H319 Causes serious eye irritation.

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· **Precautionary statements:**

- 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.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P240 Ground and bond container and receiving equipment.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

64-17-5	ethanol	 Flammable Liquids - Category 2, H225  Eye Irritation - Category 2A, H319	60-80%
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· **Additional information:**

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· **Information for doctor**

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

Headache

Dizziness

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Thirst  
Gastric or intestinal disorders  
Irritant to eyes.  
Disorientation  
Unconsciousness

· **Danger:**

Vapours may cause drowsiness and dizziness.  
Condition may deteriorate with alcohol consumption.

· **Indication of any immediate medical attention and special treatment needed:**

Medical supervision for at least 48 hours.  
Treat skin and mucous membrane with antihistamine and corticoid preparations.  
In cases of irritation to the lungs, initial treatment with corticoid steroid inhalants.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** None.

· **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)

In certain fire conditions, traces of other toxic gases cannot be excluded.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:** Cool endangered receptacles with water spray.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures:**

Keep away from ignition sources.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water

· **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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## 7 Handling and storage

- **Handling**
- **Precautions for safe handling:** Use only in well ventilated areas.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect from heat.
  - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
  - Store in a cool location.
  - Provide ventilation for receptacles.
  - Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s):** No relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

### Components with limit values that require monitoring at the workplace:

#### 64-17-5 ethanol

PEL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm
EL (Canada)	Short-term value: 1000 ppm
EV (Canada)	Long-term value: 1,900 mg/m <sup>3</sup> , 1,000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm
	A3

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - The usual precautionary measures for handling chemicals should be followed.
  - Do not breathe dust/fume/gas/mist/vapors/spray.
  - Wash hands before breaks and at the end of work.
- **Breathing equipment:**
  - Not required under normal conditions of use.
  - For spills, respiratory protection may be advisable.

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· **Protection of 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

· **Material of gloves**

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 can not 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.

· **Eye protection:**



Safety glasses

· **Body protection:** Not required under normal conditions of use.

· **Limitation and supervision of exposure into the environment** No special requirements.

· **Risk management measures**

See Section 7 for additional information.

No relevant information available.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General information**

· **Appearance:**

· <b>Form:</b>	Solid gel.
· <b>Color:</b>	Colorless
· <b>Odor:</b>	Alcohol-like
· <b>Odor threshold:</b>	Not determined.

· **pH-value at 20 °C (68 °F):** 7

· **Change in condition:**

· <b>Melting point/Melting range:</b>	-114 °C (-173 °F)
· <b>Boiling point/Boiling range:</b>	78 °C (172 °F)

· **Flash point:** >16 °C (>61 °F)

· **Flammability (solid, gaseous):** Highly flammable.

· **Auto-ignition temperature:** 363 °C (685 °F)

· **Decomposition temperature:** Not determined.

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· <b>Auto igniting:</b>	Product is not self-igniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.3 Vol %
<b>Upper:</b>	19.0 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	79 hPa (59 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.79 g/cm <sup>3</sup> (6.593 lbs/gal)
· <b>Relative density:</b>	Not determined.
· <b>Vapor density:</b>	Not applicable.
· <b>Evaporation rate:</b>	Not applicable.
· <b>Solubility in / Miscibility with:</b>	
<b>Water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
· <b>Other information</b>	No relevant information available.

### 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:**  
Flammable solid.  
Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.  
Used empty containers may contain product gases which form explosive mixtures with air.
- **Conditions to avoid:**  
Keep ignition sources away - Do not smoke.  
Store away from oxidizing agents.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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## 11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

### 64-17-5 ethanol

Oral	LD50	7060 mg/kg (rat)
Inhalative	LC50/4 h	20000 mg/l (rat)

- Primary irritant effect:
  - On the skin: No irritant effect.
  - On the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
 

Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

9003-01-4 Carbopols

3

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Vapors have narcotic effect.  
Irritating to eyes.

· Repeated dose toxicity: From product as supplied: None.

## 12 Ecological information

- Toxicity
- Aquatic toxicity: No relevant information available.
- Persistence and degradability: Biodegradable.
- Behavior in environmental systems
- Bioaccumulative potential: Does not accumulate in organisms
- Mobility in soil: No relevant information available.
- Additional ecological information
- General notes:
 

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
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.  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:** EPA RCRA Code (USA): D001.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1325

- **UN proper shipping name**



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

- **DOT** Flammable solids, organic, n.o.s. (Ethanol)
- **ADR** 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (ETHANOL)
- **IMDG, IATA** FLAMMABLE SOLID, ORGANIC, N.O.S. (ETHANOL)

- **Transport hazard class(es)**

- **DOT**



- **Class** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives
- **Label** 4.1

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## · ADR



· **Class** 4.1 (F1) Flammable solids, self-reactive substances and solid desensitised explosives

· **Label** 4.1

## · IMDG, IATA



· **Class** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives

· **Label** 4.1

· **Packing group**

· **DOT, ADR, IMDG, IATA** II

· **Environmental hazards**

· **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable solids, self-reactive substances and solid desensitised explosives

· **Danger code (Kemler):** 33

· **EMS Number:** F-A,S-G

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT**

· **Hazardous substance:** 1 lbs, 0,454 kg

· **ADR**

· **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation"**

UN 1325 FLAMMABLE SOLIDS, ORGANIC, N.O.S. (ETHANOL), 4.1, II

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## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

### · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

### · Section 304 (emergency release notification):

None of the ingredients are listed.

### · Sections 311/312 (hazardous chemical threshold planning quantity in pounds):

None of the ingredients are listed.

### · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

### · Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

### · TSCA (Toxic Substances Control Act)

All ingredients are listed.

### · Proposition 65 (California)

#### · Chemicals known to cause cancer:

None of the ingredients are listed.

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

#### · Chemicals known to cause developmental toxicity:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5 | ethanol

### · Carcinogenic categories

#### · EPA (Environmental Protection Agency):

None of the ingredients are listed.

#### · IARC (International Agency for Research on Cancer):

64-17-5	ethanol	1
9003-01-4	Carbopols	3

#### · NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

#### · Canada

#### · Canadian substance listings

#### · Canadian Domestic Substances List (DSL):

All ingredients are listed.

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

64-17-5	ethanol
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· **Canadian Ingredient Disclosure list (limit 1%):**

None of the ingredients are listed.

### 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.

· **Date of preparation / last revision** 11/16/2015 / -

· **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

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flammable Liquids - Category 2: Flammable liquids, Hazard Category 2

Flammable Solids - Category 1: Flammable solids, Hazard Category 1

Eye Irritation - Category 2A: Serious eye damage/eye irritation, Hazard Category 2A