



Safety Data Sheet



according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and Globally Harmonized System (GHS)

Revision: June 26, 2023

1 Identification

- **Product identifier**
- **Trade name:** Sterno Ethanol Green 45 min
- **Product code:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Food Warming Chafing Fuel
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Sterno, LLC
6900 North Dallas Parkway, Suite 870
Plano, TX 75024
Phone: (951) 682-9600
- **Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Eye Irrit. 2A H319 Causes serious eye irritation.
- **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:**

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
- **Precautionary statements:**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.

(Cont'd. on page 2)



Safety Data Sheet

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Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

- P260 Do not breathe mist/vapors/spray.
 P264 Wash thoroughly after handling.
 P280 Wear protective gloves and eye protection.
 P240 Ground/bond container and receiving equipment.
 P233 Keep container tightly closed.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P303+P361+P353 If on skin (or hair): 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.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P330 Rinse mouth.
 P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
 P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system**

· **NFPA ratings (scale 0 - 4)**



· **HMS-ratings (scale 0 - 4)**



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

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

64-17-5	ethanol	Flam. Liq. 2, H225 Eye Irrit. 2A, H319	>50%
75-65-0	tert-Butyl alcohol	Flam. Liq. 2, H225 Eye Irrit. H320	<1%

- **Non-hazardous Components:** Bitrex (denatonium benzoate) - CAS# 3734-33-6 <1%

· **Additional information:**

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

(Cont'd. on page 3)



Safety Data Sheet

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Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

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

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Take affected persons out into the fresh air.
- **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.
- **Most important symptoms and effects, both acute and delayed:**
Headache
Dizziness
Thirst
Blindness
Nausea
Acidosis
Disorientation
Unconsciousness
- **Danger:**
Danger of convulsion.
Danger of circulatory collapse.
Danger of impaired breathing.
Harmful if swallowed, in contact with skin or if inhaled.
- **Indication of any immediate medical attention and special treatment needed:**
Contains methanol / methyl alcohol. Consult literature for specific antidotes.
May produce a narcotic effect.
Medical supervision for at least 48 hours.
Monitor circulation, possible shock treatment.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, 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**
During heating or in case of fire poisonous gases are produced.

(Cont'd. on page 4)



Safety Data Sheet

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.
- **Additional information:**
 - Eliminate all ignition sources if safe to do so.
 - Cool endangered receptacles with water spray.
 - Use large quantities of foam as it is partially destroyed by the product.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
 - Use respiratory protective device against the effects of fumes/dust/aerosol.
 - Keep away from ignition sources.
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation.
- **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.
 - Dispose contaminated material as waste according to item 13.
- **Reference to other sections:**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Store in cool, dry place in tightly closed receptacles.
 - 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.
- **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.
 - Keep containers tightly sealed.
- **Specific end use(s):** No relevant information available.

(Cont'd. on page 5)

**Safety Data Sheet**

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and
Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

8 Exposure controls/personal protection· **Control parameters**· **Components with limit values that require monitoring at the workplace:****64-17-5 ethanol**

PEL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m ³ , 1000 ppm
EL (Canada)	Short-term value: 1000 ppm
EV (Canada)	Long-term value: 1.900 mg/m ³ , 1.000 ppm
LMPE (Mexico)	Long-term value: 1000 ppm A3

67-56-1 methanol

PEL (USA)	Long-term value: 260 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI
EL (Canada)	Short-term value: 250 ppm Long-term value: 200 ppm Skin
EV (Canada)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
LMPE (Mexico)	Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE

· **Ingredients with biological limit values:****67-56-1 methanol**

BEI (USA)	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
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· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Immediately remove all soiled and contaminated clothing.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.

(Cont'd. on page 6)

**Safety Data Sheet**

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and
Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.
For spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Safety glasses

- **Body protection:**
Protection may be required for spills.
Not required under normal conditions of use.
- **Limitation and supervision of exposure into the environment**
No relevant information available.
- **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**

- **Appearance:**

Form: Highly viscous

Color: Pink or Green

- **Odor:** Alcohol-like

- **Odor threshold:** Not determined.

- **pH-value at 20 °C (68 °F):** 8.0 ± 0.5

- **Melting point/Melting range:** Not determined.

- **Boiling point/Boiling range:** 76 °C (169 °F)

- **Flash point:** 27°C (80.6°F)

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

- **Auto-ignition temperature:** Not determined.

- **Decomposition temperature:** Not determined.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits**

Lower: 3.5 Vol %

(Cont'd. on page 7)

**Safety Data Sheet**

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and
Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

Upper:	15.0 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44 mm Hg)
· Density at 20 °C (68 °F):	0.8 g/cm ³ (6.676 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not applicable.
· Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	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:**
Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Develops readily flammable gases / fumes.
Develops toxic gases / fumes.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid:**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
Keep away from heat and direct sunlight.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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)
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(Cont'd. on page 8)



Safety Data Sheet

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

Inhalative	LC50/4 h	20000 mg/l (rat)
67-56-1 methanol		
Oral	LD50	5628 mg/kg (rat)
Dermal	LD50	15800 mg/kg (rabbit)

- **Primary irritant effect:**
- **On the skin:** No irritant effect.
- **On the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** May cause damage to the central nervous system and optic nerve.
- **Carcinogenic categories**

IARC (International Agency for Research on Cancer):

64-17-5 | ethanol

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):

Irritating to eyes.
Harmful if swallowed, in contact with skin or if inhaled.

Repeated dose toxicity:

May cause damage to organs through prolonged or repeated exposure.
Possible risk of irreversible effects.
Repeated exposure may cause skin dryness or cracking.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause damage to the central nervous system and optic nerve.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** Biodegradable.
- **Bioaccumulative potential:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.

(Cont'd. on page 9)



Safety Data Sheet

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Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

- **Additional ecological information**

- **General notes:**

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

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.

- **Other adverse effects:** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Smaller quantities can be disposed of with household waste.

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.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- **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** UN1987

- **UN proper shipping name**



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).

- **DOT**

Alcohols, n.o.s. (Ethanol)

- **ADR**

1987 ALCOHOLS, N.O.S. (ETHANOL)

- **IMDG, IATA**

ALCOHOLS, N.O.S. (ETHANOL)

- **Transport hazard class(es)**

- **DOT**



- **Class**

3 Flammable liquids


(Cont'd. on page 10)

**Safety Data Sheet**

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and
Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

· Label	3
· ADR	
	
· Class	3 (F1) Flammable liquids
· Label	3

· IMDG, IATA

	
· Class	3 Flammable liquids
· Label	3

· Packing group	
· DOT, ADR, IMDG, IATA	III

· Environmental hazards	
· Marine pollutant:	No

· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
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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.

(Cont'd. on page 11)

**Safety Data Sheet**

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Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

<ul style="list-style-type: none"> • TSCA (Toxic Substances Control Act)
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All ingredients are listed.

<ul style="list-style-type: none"> • Proposition 65 (California)
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<ul style="list-style-type: none"> • Chemicals known to cause cancer:

64-17-5	ethanol
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<ul style="list-style-type: none"> • Chemicals known to cause reproductive toxicity: Substance is listed.

<ul style="list-style-type: none"> • Chemicals known to cause reproductive toxicity for females:
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None of the ingredients are listed.

<ul style="list-style-type: none"> • Chemicals known to cause reproductive toxicity for males:
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None of the ingredients are listed.

<ul style="list-style-type: none"> • Chemicals known to cause developmental toxicity:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.
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64-17-5	ethanol
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<ul style="list-style-type: none"> • Carcinogenic categories
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<ul style="list-style-type: none"> • EPA (Environmental Protection Agency):

None of the ingredients are listed.

<ul style="list-style-type: none"> • IARC (International Agency for Research on Cancer):
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64-17-5	ethanol
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<ul style="list-style-type: none"> • NIOSH-Ca (National Institute for Occupational Safety and Health):
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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** 05/02/2016 / -

- **Abbreviations and acronyms:**

ADR: 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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

(Cont'd. on page 12)



Safety Data Sheet

according to OSHA HCS (29 CFR 1910.1200), WHMIS 2015 Regulations and
Globally Harmonized System (GHS)

Revision: June 26, 2023

Trade name: Sterno Ethanol Green 45 min

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1
STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

• **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers