

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification

· Product identifier

Trade name: <u>Sterno Ethanol Gel</u>
 Product code: No other identifiers

· Recommended use and restriction on use

· Recommended use: Fuel

· Restrictions on use: No relevant information available.

· Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Sterno Products

1880 Compton Ave. #101

Corona, CA 92881 Phone: (951) 682-9600

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Flam, Sol. 1 H228 Flammable solid.

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:

H228 Flammable solid.

H319 Causes serious eye irritation.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P264 Wash thoroughly after handling.

P280 Wear protective gloves and eye protection.

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: CO2, powder or water spray.

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



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3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

64-17-5 Ethanol

Flam. Liq. 2, H225 (1) Eye Irrit. 2A, H319 50-100%

· Additional information:

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

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

4 First-aid measures

- Description of first aid measures
- · 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

Gastric or intestinal disorders

Unconsciousness

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

Medical supervision for at least 48 hours.

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

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.

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6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions Avoid release to the environment.
- · Methods and material for containment and cleaning up

Pick up mechanically.

Clean the affected area carefully; suitable cleaners are:

Warm water

Send for recovery or disposal in suitable receptacles.

· 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
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep containers tightly sealed.

Store receptacle in a well ventilated area.

· Specific end use(s) No relevant information available.

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/m³, 1000 ppm		
REL (USA)	Long-term value: 1900 mg/m³, 1000 ppm		
TLV (USA)	Short-term value: 1880 mg/m³, 1000 ppm		
EL (Canada)	Short-term value: 1000 ppm		

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EV (Canada) Long-term value: 1,900 mg/m³, 1,000 ppm

LMPE (Mexico) Long-term value: 1000 ppm

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· Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

- · Engineering controls: No relevant information available.
- · Breathing equipment:

Not required under normal conditions of use.

For spills, respiratory protection may be advisable.

· Protection of hands:

Gloves are advised for repeated or prolonged contact.

Wear protective gloves to handle contents of damaged or leaking units.

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

• Eye protection:



Safety glasses

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures See Section 7 for additional information.

9 Physical and chemical properties · Information on basic physical and chemical properties · Appearance: Form: Highly viscous Color: Pink · Odor: Alcohol-like · Odor threshold: Not determined. · pH-value: · Melting point/Melting range: Not determined. Boiling point/Boiling range: 78 °C (172.4 °F) · Flash point: 13 °C (55.4 °F) · Flammability (solid, gaseous): Highly flammable. · Auto-ignition temperature: 425 °C (797 °F) · Decomposition temperature: Not determined. · Danger of explosion: Product is not explosive. However, formation of explosive air/ vapor mixtures are possible. · Explosion limits (Cont'd. on page 5)





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Lower: 3.5 Vol %
Upper: 15.0 Vol %

Oxidizing properties: Not determined.

· Vapor pressure: 59 hPa (44.3 mm Hg)

· Density:

Relative density: 0.8 g/cm³ (6.68 lbs/gal)

Vapor density:

Evaporation rate:

Not applicable.

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.

Flammable.

Used empty containers may contain product gases which form explosive mixtures with air.

- · Conditions to avoid Excessive heat.
- · Incompatible materials Oxidizers
- · Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 v	values that a	e relevant for	classification:
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64-17-5 Ethanol

 Oral
 LD50
 7060 mg/kg (rat)

 Inhalative
 LC50/4h
 20000 mg/l (rat)

- · Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Causes eye irritation.
- Sensitization: Based on available data, the classification criteria are not met.

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· IARC (International Agency for Research on Cancer):

64-17-5 Ethanol

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· 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.

Eve contact.

Skin contact.

- · 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: Based on available data, the classification criteria are not met.
- · 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.
- · Additional ecological information
- · General notes:

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

· 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.

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.





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14 Transport information				
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	UN1325			
UN proper shipping name DOT, ADR/RID/ADN, IMDG, IATA	FLAMMABLE SOLID, ORGANIC, N.O.S. (Ethanol)			
· Transport hazard class(es)				
· DOT				
· Class	4.1			
· Label	4.1			
· ADR/RID/ADN				
· Class	4.1 (F1)			
· Label	4.1 			
· IMDG, IATA				
· Class	4.1			
· Label	4.1			
 Packing group DOT, ADR/RID/ADN, 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):EMS Number:	33 F-A,S-G			
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.				
· Transport/Additional information:				
· DOT				
Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 kg each.				

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· Hazardous substance:

1 lbs, 0.454 kg

· ADR/RID/ADN



Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 kg each.

· IMDG



Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 kg each.

·IATA



Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.5 kg each / 5 kg net.

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 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 or exempt.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

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

64-17-5 Ethanol

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental 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

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· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

64-17-5 Ethanol

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· Canadian Domestic Substances List (DSL):

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.

· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Flam. Liq. 2: Flammable liquids - Category 2

Flam. Sol. 1: Flammable solids - Category 1

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

· Sources

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

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/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: 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

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