

# Thunderclap (aerosol)

## Safety Data Sheet

### SECTION 1: Product and company identification

Product name : Thunderclap (aerosol)  
Use of the substance/mixture : Aerosol  
Coating  
Product code : SKU AA59 (8346)  
Company : GREEN CHEM LABORATORIES  
1650 Market Street  
Suite 3631  
PHILADELPHIA, PA 19103 - US  
T 1-800-964-3151 - F 1-800-336-9068  
Emergency number : For Chemical Emergency Call INFOTRAC 24hr/day 7days/week  
Within USA and Canada: 1-800-535-5053  
Outside USA and Canada: 1-352-323-3500  
(collect calls accepted)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

GHS-US classification  
Flam. Aerosol 1 H222  
Eye Irrit. 2A H319  
STOT SE 3 H336

#### 2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US) :



GHS02 GHS07

Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Extremely flammable aerosol  
Causes serious eye irritation  
May cause drowsiness or dizziness

Precautionary statements (GHS US) :

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not spray on an open flame or other ignition source.  
Do not pierce or burn, even after use.  
Avoid breathing gas.  
Wash hands thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear eye protection, face protection.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Call a doctor, a POISON CENTER if you feel unwell.  
If eye irritation persists: Get medical advice or attention.  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding 122 °F (50 °C).  
Dispose of contents and/or container to comply with local/regional/national/international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
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Acetone	(CAS-No.) 67-64-1	40-60	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Ethylene Glycol	(CAS-No.) 107-21-1	2.5-10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 STOT SE 1, H370 STOT RE 2, H373
Isopropanol	(CAS-No.) 67-63-0	2.5-10	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : If breathing is difficult, give oxygen. Get immediate medical attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this sheet where possible. Keep victim warm and rested.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Artificial respiration and/or oxygen if necessary. Do not apply mouth-to-mouth resuscitation. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Immediately call a POISON CENTER/doctor.
- First-aid measures after ingestion : Rinse mouth with water. Get immediate medical advice/attention. Do not induce vomiting without medical advice. Drink plenty of water. If vomiting occurs have person lean forward.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes serious eye irritation. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Irritation of the nasal mucous membranes. Irritation to throat.
- Symptoms/effects after inhalation : Irritation of the nasal mucous membranes. May cause drowsiness or dizziness. Headache. Nausea. Vomiting.
- Symptoms/effects after skin contact : No effects known.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed. Keep watching the victim.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water fog. Alcohol-resistant foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable aerosol. Under fire conditions closed containers may rupture or explode. Combustion produces irritating gases.
- Explosion hazard : Contents under pressure. Pressurized container: May burst if heated.
- Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed. Toxic gases may be formed. Irritating gases. In case of fire, corrosive gases come free.

#### 5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Move containers away from the fire area if this can be done without risk. Use water spray or fog for cooling exposed containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Stay upwind/keep distance from source. Evacuate unnecessary personnel. Vapours may travel long distances along ground before igniting/flashing back to vapour source.

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### 6.1.1. For non-emergency personnel

- Protective equipment : Do not enter without an appropriate protective equipment. Advise local authorities if considered necessary. Do not touch spilled material. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).
- Emergency procedures : Do not breathe gas. Evacuate unnecessary personnel. Keep upwind. Ventilate spillage area.

### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Advise local authorities if considered necessary. Stop leak if safe to do so. Do not contaminate water with the product or its container. Prevent entry to sewers and public waters. Do not allow to enter drains or water courses.

### 6.3. Methods and material for containment and cleaning up

- For containment : Eliminate every possible source of ignition. Prevent the product from entering drains or confined areas. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Vapours are heavier than air and may spread along floors. Stop leak if safe to do so. Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Isolate area until gas has dispersed. Collect spillage.
- Methods for cleaning up : Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Dispose as hazardous waste.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Do not use if spray button is missing or defective. Do not pierce or burn, even after use. Keep away from heat, sparks and flame.
- Precautions for safe handling : Avoid prolonged and repeated contact with skin. Intentional misuse by deliberately concentrating and inhaling may be harmful or fatal. Do not breathe gas/vapour/aerosol. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not spray on a naked flame or any incandescent material. Do not smoke while handling product. Ground/bond container and receiving equipment. Do not re-use empty containers. Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Observe normal hygiene standards. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not discharge the waste into the drain.
- Hygiene measures : Wash thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Pressurized container. Do not puncture, incinerate or crush. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep cool. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F. Refrigerate.
- Storage temperature : < 49 °C
- Storage area : Aerosol 2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Thunderclap (aerosol)

ACGIH	Not applicable
OSHA	Not applicable

#### Ethylene Glycol (107-21-1)

ACGIH	ACGIH® TLV® TWA	25 ppm (V - Vapor fraction)
ACGIH	ACGIH® TLV® STEL	10 mg/m <sup>3</sup> (I - Inhalable particulate matter, H - Aerosol only)
ACGIH	ACGIH® TLV® STEL	50 ppm (V - Vapor fraction)
ACGIH	Remark (ACGIH®)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
OSHA	Not applicable	

#### Isopropanol (67-63-0)

ACGIH	ACGIH® TLV® TWA	491 mg/m <sup>3</sup>
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ACGIH	ACGIH® TLV® TWA	200 ppm
ACGIH	ACGIH® TLV® STEL	984 mg/m <sup>3</sup>
ACGIH	ACGIH® TLV® STEL	400 ppm
ACGIH	Remark (ACGIH®)	TLV® Basis: Eye & URT irr; CNS repair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
OSHA	OSHA PEL TWA	980 mg/m <sup>3</sup>
OSHA	OSHA PEL TWA	400 ppm

### Acetone (67-64-1)

ACGIH	ACGIH® TLV® TWA	594 mg/m <sup>3</sup>
ACGIH	ACGIH® TLV® TWA	250 ppm
ACGIH	ACGIH® TLV® STEL	1187 mg/m <sup>3</sup>
ACGIH	ACGIH® TLV® STEL	500 ppm
ACGIH	Remark (ACGIH®)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
OSHA	OSHA PEL TWA	2400 mg/m <sup>3</sup>
OSHA	OSHA PEL TWA	1000 ppm

### 8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. If exposure limits have not been established, maintain airborne levels to an acceptable level. . Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. . Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Gloves. Protective goggles. Protective clothing. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Aerosol,brown
Odour	: Solvent-like odour
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 74.69 °F Estimated
Flash point	: -156 °F Propellant estimated
Relative evaporation rate (butylacetate=1)	: No data available
Flammability	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20°C	: No data available
Density	: 0.519 g/ml Estimated
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed. Toxic gases may be formed. irritating gases. In case of fire, corrosive gases come free.

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### 10.2. Chemical stability

Risk of explosion. Risk of ignition. Unstable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks. Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point. Incompatible materials.

### 10.5. Incompatible materials

Strong oxidizing agents. Nitrates. Peroxides. Fluorine. Chlorine. Do not mix with other chemicals. May form an explosive mixture in the presence of air.

### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Phosphorous oxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : No data available

#### Ethylene Glycol (107-21-1)

LD50 oral rat	4700 mg/kg
LD50 dermal rabbit	10626 mg/kg
ATE CLP (oral)	500 mg/kg bodyweight
ATE CLP (dermal)	10626 mg/kg bodyweight

#### Isopropanol (67-63-0)

LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	13120 mg/kg bw/day (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Converted value, Dermal, 14 day(s))
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE CLP (oral)	5840 mg/kg bodyweight
ATE CLP (dermal)	16400000 mg/kg bodyweight

Skin corrosion/irritation : No data available (Based on available data, the classification criteria are not met)  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : No data available (Based on available data, the classification criteria are not met)  
Germ cell mutagenicity : No data available (Based on available data, the classification criteria are not met)  
Carcinogenicity : No data available (Based on available data, the classification criteria are not met)

#### Isopropanol (67-63-0)

IARC group	3 - Not classifiable
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Reproductive toxicity : No data available (Based on available data, the classification criteria are not met)  
STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met).

Aspiration hazard : Not applicable  
Symptoms/effects after inhalation : Irritation of the nasal mucous membranes. May cause drowsiness or dizziness. Headache. Nausea. Vomiting.  
Symptoms/effects after skin contact : No effects known.  
Symptoms/effects after eye contact : Causes serious eye irritation.  
Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.  
Likely routes of exposure : Skin and eyes contact;Inhalation

## SECTION 12: Ecological information

### 12.1. Toxicity

Isopropanol (67-63-0)

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LC50 - Fish [1]	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas

### 12.2. Persistence and degradability

Isopropanol (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.2 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.2 g O <sub>2</sub> /g substance
ThOD	2.4 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

Isopropanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Contents under pressure. Do not puncture, incinerate or crush.
Product/Packaging disposal recommendations	: Dispose of contents/container to comply with local/regional/national regulations.

## SECTION 14: Transport information

### Department of Transportation (DOT)

Transport document description (DOT)	: UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1
UN-No. (DOT)	: UN1950
Proper Shipping Name (DOT)	: Aerosols (flammable, (each not exceeding 1 L capacity))
Class (DOT)	: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
Hazard labels (DOT)	: 2.1 - Flammable gas



DOT Packaging Non Bulk (49 CFR 173.xxx)	: None
DOT Packaging Bulk (49 CFR 173.xxx)	: None
DOT Special Provisions (49 CFR 172.102)	: N82
DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

### Additional information

Other information	: When transported by ground, this product may be eligible to be shipped as a Limited Quantity utilizing the exception found at 49 CFR 173.306. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.
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### ADR

No additional information available

### Transport by sea

UN-No. (IMDG)	: UN1950
Proper Shipping Name (IMDG)	: AEROSOLS
Class (IMDG)	: 2.1 - Flammable gases

### Air transport

UN-No. (IATA)	: UN1950
Proper Shipping Name (IATA)	: Aerosols, flammable
Class (IATA)	: 2.1 - Gases : Flammable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

#### Ethylene Glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 5000 lb

#### Acetone (67-64-1)

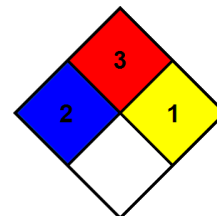
CERCLA RQ 5000 lb

#### WARNING

This product can expose you to chemicals including Acetaldehyde, which is known to the State of California to cause cancer, and Ethylene glycol (ingested), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### SECTION 16: Other information

- Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.
- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.