Enviro-Safe Boss Propane with Tip Cleaner

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Enviro-Safe Boss Propane with Tip Cleaner
SDS Number: 5435
Revision Date: 7/22/2021
Version: 3.0
Product Description: Used with torch heads for soldering, braising and many more uses!

Supplier Details:
Enviro-Safe Refrigerants, Inc.
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2 HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Gases, 1
Physical, Flammable Liquids, 1
Physical, Gases Under Pressure, Compressed Gas
Health, Acute toxicity, 4 Oral
Health, Skin corrosion/irritation, 3
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Acute toxicity, 4 Inhalation
Environmental, Hazards to the aquatic environment - Acute, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H220 - Extremely flammable gas
H224 - Extremely flammable liquid and vapour
H280 - Contains gas under pressure; may explode if heated
H302 - Harmful if swallowed
H316 - Causes mild skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H400 - Very toxic to aquatic life
OSHA-H01 - May displace oxygen and cause rapid suffocation

GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P210 - Keep away from heat/sparks/open flames/hot surfaces.
P273 - Avoid release to the environment.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - In case of leakage, eliminate all ignition sources.
P403 - Store in a well-ventilated place.

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P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
68476-85-7		Petroleum gases, liquefied
-40-7		Tip Cleaner
75-08-1		Ethyl mercaptan

4 FIRST AID MEASURES

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are servere. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. In case of contact with liquid, warm frozen slowly with lukewarm water and get medical attention. Do not rub affected area. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section.

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries After Inhalation: Asphyxiant gas.

Symptoms/Injuries After Skin Contact: Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.

Symptoms/Injuries After Eye Contact: Liquid can cause burns similar to frostbite.

Symptoms/Injuries After Ingestion: Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

5 FIRE FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extingushing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.

5.3. Advice for Firefighters

Firefighting Instructions: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources, if safe to do so.

Protection During Firefighting: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

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6 ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip clean up crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

7 HANDLING AND STORAGE

Handling Precautions:

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Personnel should be trained to regularly inspect equipment such as pumps, hoses, and valves. Do not breathe gas. Ensure there is adequate ventilation. Close valve after each use and when empty. Open valve slowly to avoid pressure shock. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-puncture or incinerate container. use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Storage Requirements:

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Keep at temperatures below 52 °C/125 °F.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep in fireproof place. Store locked up.

Incompatible Products: Heat sources. Oxidizers.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker to airborne contaminates below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal Protective Equipment:

HMIS PP, H | Splash Goggles, Gloves, Apron, Vapor Respirator

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Gas mask. Protective goggles. Gloves. Protective clothing.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear working gloves when handling gas containers.

Eye Protection: Safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: use a NIOSH-approved self-contained breathing apparatus in oxygen deficient atmospheres.

Thermal hazard Protection: Wear cold insulating gloves.

Ethyl Mercaptin (75-08-7)

Personal Protective Equipment

Respiratory Protection: Full face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. use respirators ane components tested and approved under appropriate government

standards such as NIOSH (US) or CEN (EU).
Hand Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye Protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards suc as NIOSH (US) or EN 166 (EU).
Skin and Body Protection: Complete suit protecting against chemicals. Flame retardant anti-static protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Tip Cleaner

Personal Protective Equipment

Respiratory Protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate governement standards such as NIOSH (US) or EN 166(EU).
Hand Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection: Complete suit protecting against chemicals. Flame retardant anti-static protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator catridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and compontents tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Controls of Environmental Exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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USA ACGIH - ACGIH TWA (ppm): 1000ppm
USA NIOSH - NIOSH REL (TWA) (mg/m3): 1800mg/m3
USA NIOSH - NIOSH REL (TWA) (ppm): 1000ppm
USA IDLH - US IDLH (ppm): 2100ppm (10% LEL)
USA OSHA - OSHA PEL (TWA) (mg/m3): 1800mg/m3
USA OSHA - OSHA PEL (TWA) (ppm): 1000ppm

Tip Cleaner

Components with the workplace control parameters

TWA 30ppm USA. Workplace Environment Exposure Levels (WEEL)

Ethyl Mercaptin (75-08-1)

Components with workplace control parameters

C 0.5ppm USA. NIOSH Recommended Exposure Limits
1.3 mg/m3
15 minute ceiling value

TWA 0.5 USA. ACGIH Threshold Limit Values (TLV)

Central Nervous System Impairment Upper Respiratory Tract Irritation

C 10ppm USA. Occupational Exposure Limits (OSHA) - Table Z - 1 Limits for Air Contaminants
25 mg/m3

The value in mg/m3 is approximate. Ceiling limit is to be determined form breathing-zone air samples.

TWA 0.5ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
1 mg/m3

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless		
Physical State:	Gas	**Odor:**	Sulfur odor added
Odor Threshold:	No data available	**Solubility:**	No data available
Specific Gravity or Density:	0.540	**Freezing or Melting Point:**	- 166.11 °C (- 267 °F)
Viscosity:	No data available	**Flash Point:**	No data available
Boiling Point:	- 34.66 °C (- 30.4 °F)	**Vapor Density:**	1.76
Partition Coefficient:	No data available	**Autoignition Temperature:**	862.77 °C (1585 °F)
Vapor Pressure:	70 @ 70 °F	**Upper Flammability Limit and Lower Flammability Limit:**	8.5 % / 1.9 %
Potentia Hydrogenii:	No data available		
Evaporation Rate:	Rapid		
Decompression Temperature:	No data available		

10 STABILITY AND REACTIVITY

Reactivity:	Contains gas under pressure; may explode if heated. Reacts with oxidants causing fire and explosion hazard.
Chemical Stability:	Stable under recommended handling and storage conditions (see Section 7).
Conditions to AvoIdentification:	Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks.
Materials to AvoIdentification:	Heat. Strong Oxidizing Agents.
Hazardous Decomposition:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous Polymerization:	Hazardous polymerization will not occur.

11 TOXICOLOGICAL INFORMATION

Petroleum gases, liquefied cas#(68476-85-7)

Information on Toxicology
Acute Toxicity: Not classified
LC50 Inhalation Rat: 658mg/l/4h
Petroleum Oil: > 2000 mg/kg
LD 50 Oral Rat: > 2000 mg/kg
LD50 Dermal Rat: > 2000 mg/kg
LC50 Inhalation Rat: > 2000 mg/kg

Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitiation: Not classified
Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified

Ethyl mercaptan cas#:(75-08-1)

Information on toxicological effects

Acute toxicity:
Oral LD50 LD50 Oral - rat - 682 mg/kg Remarks: Behavioral:Muscle weakness. Behavioral:Ataxia. Cyanosis
Inhalation LC50 LC50 Inhalation - rat - 4 h - 4420 ppm Remarks: Peripheral Nerve and Sensation:Spastic paralysis with or without sensory change. Behavioral:Excitement.
Dermal LD50 no data available
Other information on acute toxicity

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Skin corrosion/irritation: Skin - rabbit - Mild skin irritation - 24 h
Serious eye damage/eye irritation: Eyes - rabbit - No eye irritation - 72 h
Respiratory or skin sensitization: no data available
Germ cell mutagenicity: no data available
Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: no data available
Teratogenicity: no data available
Specific target organ toxicity - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available
Aspiration hazard: no data available
Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.
Signs and Symptoms of Exposure: Nausea, Headache, Vomiting, prolonged or repeated exposure can cause:, narcosis
Synergistic effects: no data available
Additional Information: RTECS: KI9625000

12 ECOLOGICAL INFORMATION

Petroleum gases, liquefied cas#:(68476-85-7)

Information on Ecology
Toxicity: No additional information
Persistence and Degradability: No additional information available
Bioaccumulative Potential ---
Log Pow: < 1
Petroleum gases, liquefied (68476-85-7)
Log Pow: 2.3
Mobility in Soil: No additional information available
Other Adverse Effects: No additional information available

Tip Cleaner cas#:(-40-7)

Ecology - General -
LC50 Fish 1: > 5 g/l (LL50)
Persistence and Degradability: Inherently biodegradable.
Bioaccumulative Potential: The potential for bioaccumulation seems negligible based on data from other similar material and the biodgradability. It is unlikely to breakdown or remain in the air, but rather become absor ed to the soil and sediments and thus not be available to biota.
Mobility in Soil: Low solubility and floats and is expected to migrate from the water to the land. Expected to partition to sediment and wastewater solids.
Other Adverse Effects: No additional information available.

Ethyl mercaptan cas#:(75-08-1)

Information on ecological effects

Toxicity:
Toxicity to fish NOEC - Oncorhynchus mykiss (rainbow trout) - < 1.7 mg/l - 96 h.
Method: OECD Test Guideline 203
Toxicity to daphnia Immobilization EC50 - Daphnia - < 0.1 mg/l - 48 h.
and other aquatic Method: OECD Test Guideline 202 invertebrates
Persistence and degradability: Biodegradability aerobic Result: 27.1 % - Not readily biodegradable. Method: OECD Test Guideline 301D
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

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13 DISPOSAL CONSIDERATIONS

Petroleum gases, liquefied cas#:(68476-85-7)

Information on Disposal

Waste Treatment Methods

Waste Disposal Recommendation: Dispose of waste in accordance with all local, regional, national, provincial, territorial and international regulations. Additional Information: Empty product containers may contain hazardous resideu. Do not reuse empty containers without commercial cleaning or reconditioning.

Ethyl mercaptan cas#:(75-08-1)

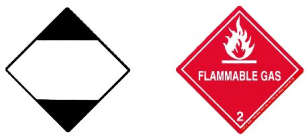
Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

14 TRANSPORT INFORMATION

14.1. In Accordance with DOT
ID8000, Consumer commodity, 9
14.2. In Accordance with IMDG
Proper Shipping Name: Petroleum gases, liquefied
Hazard Class: 2
Identification Number: UN1075
EmS-No. (Fire): F-D
EmS-No. (Spillage): S-U
Marine Pollutant: No
14.3. In Accordance with IATA
Proper Shipping Name: Petroleum gases, liquefied
Identification Number: UN1075
Hazard Class: 2
Label Codes: 2.1
ERG Code (IATA): 10L
Marine Pollutant: No



15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[--%] Petroleum gases, liquefied (68476-85-7) MASS, OSHAWAC, PA, TSCA, TXAIR

[--%] Tip Cleaner (-40-7)

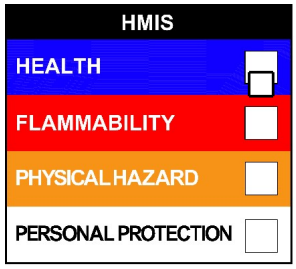
[--%] Ethyl mercaptan (75-08-1) MASS, NJEHS, NJHS, OSHAWAC, PA, TSCA, TXAIR
This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

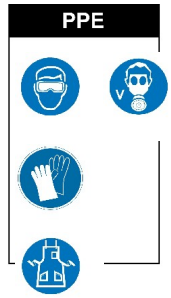
Regulatory Code Legend

Enviro-Safe Boss Propane with Tip Cleaner

MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level
NJEHS = NJ Extraordinarily Hazardous Substances
NJHS = NJ Right-to-Know Hazardous Substances

16 OTHER INFORMATION





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