

## The Boss Propane with Tip Cleaner

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** The Boss Propane with Tip Cleaner  
**Product Use:** Used with torch heads for soldering, braising and many more uses!  
**Supplier Details:** Enviro-Safe Refrigerants, Inc.  
 400 Margaret Street  
 Pekin, IL 61554

**Emergency:** Chemtrec 1-800-424-9300  
**Phone:** 309-346-1110  
**Email:** envirosafe2000@hotmail.com  
**Web:** www.es-refrigerants.com

### 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):**  
 Physical, Flammable Gases, 1  
 Environmental, Hazards to the aquatic environment - Acute, 1  
 Environmental, Hazards to the aquatic environment - Chronic, 1  
 Health, Respiratory or skin sensitization, 1 Skin  
 Health, Skin corrosion/irritation, 2  
 Physical, Flammable Liquids, 3  
 Physical, Gases under Pressure, Liquefied Gas

#### GHS Label elements, including precautionary statements

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:**



**GHS Hazard Statements:**

H220 - Extremely flammable gas  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects  
 H317 - May cause an allergic skin reaction  
 H315 - Causes skin irritation  
 H226 - Flammable liquid and vapor  
 H280 - Contains gas under pressure; may explode if heated

**GHS Precautionary Statements:**

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking  
 P233 - Keep container tightly closed.  
 P240 - Ground/bond container and receiving equipment.  
 P241 - Use explosion-proof electrical/ventilating/light/equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264 - Wash hands thoroughly after handling.  
 P272 - Contaminated work clothing should not be allowed out of the workplace.  
 P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P321 - Specific treatment (see 4 on this label).  
 P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.  
 P362 - Take off contaminated clothing and wash before reuse.  
 P370+378 - In case of fire: Use \_ for extinction.  
 P377 - Leaking gas fire: Do not extinguish unless leak can be stopped safely.  
 P381 - Eliminate all ignition sources if safe to do so.  
 P403+235 - Store in a well ventilated place. Keep cool.  
 P410+403 - Protect from sunlight. Store in a well ventilated place.  
 P501 - Dispose of contents/container in accordance with local/state/federal laws.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients:**

CAS#	%	Chemical Name
138-86-3	.02%	Tip Cleaner
68476-85-7	99.7%	Petroleum gases, liquefied
75-08-1	.28%	Ethyl Mercaptin

**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 severe. 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 tissues 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. Never give anything by mouth to an unconscious person. 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.

**Effects and symptoms, both acute and delayed:**

**Ingestion:** Ingestion is an unlikely route of exposure for a gas.  
**Inhalation:** Asphyxiant gas.  
**Skin contact:** Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.  
**Eye contact:** Liquid can cause burns similar to frostbite.

**Over-exposure signs/symptoms**

**Eye contact:** Adverse symptoms may include frostbite.  
**Inhalation:** No specific data.  
**Skin contact:** Adverse symptoms may include frostbite.  
**Ingestion:** Adverse symptoms may include frostbite.

**5 FIRE FIGHTING MEASURES**

**Flash Point:** -60°C (-76°F)

**Extinguishing Media**

**Suitable:** Use an extinguishing agent suitable for the surrounding fire.  
**Unsuitable fire extinguisher:** None known.

### 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.

### Advice for Fire Fighters

**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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### ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures:

##### For Non-emergency Personnel

Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

##### For Emergency Responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

##### Environmental Precautions

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff the contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

##### Methods and Material for Containment and Cleaning Up

**Small spill:** Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

**Large spill:** Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

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### HANDLING AND STORAGE

#### Handling Precautions:

- Put on appropriate personal protective equipment.
- Contains gas under pressure.
- Do not get in eyes or on skin or clothing.
- Avoid breathing gas.
- Use only with adequate ventilation.
- Wear appropriate respirator when ventilation is inadequate.
- Do not enter storage areas and confined spaces unless adequately ventilated.
- Store and use away from heat, sparks, open flame or any other ignition source.
- 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.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- Workers should wash hands and face before eating, drinking and smoking.
- Remove contaminated clothing and protective equipment before entering eating areas.

#### Storage Requirements:

- Store in accordance with local regulations.
- Store in a segregated and approved area.
- Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials.
- Eliminate all ignition sources.
- Keep container tightly closed and sealed until ready for use.

Cylinders should be stored upright.  
Cylinder temperatures should not exceed 52°C (125°F).

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls:

Use only with adequate ventilation.  
Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants 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:

Tip Cleaner (138-86-3) [.02%]

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min Material tested: Camatril (KCL 730 / Aldrich Z677442, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 30 min Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: Complete suit protecting against chemicals. Flame retardant antistatic 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 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 and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

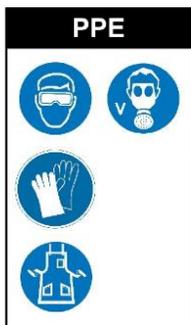
Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Ethyl Mercaptin (75-08-1) [.28%]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a 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 and 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. Full contact Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 480 min Material tested: Vitoject (KCL 890 / Aldrich Z677698, Size M) Splash contact data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for



any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals. Flame retardant antistatic 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 (138-86-3) [.02%]

Components with workplace control parameters

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

Ethyl Mercaptin (75-08-1) [.28%]

Components with workplace control parameters

C 0.5 ppm USA. NIOSH Recommended Exposure Limits  
1.3 mg/m<sup>3</sup>  
15 minute ceiling value

TWA 0.5 ppm USA. ACGIH Threshold Limit Values (TLV)  
Central Nervous System impairment Upper Respiratory Tract irritation

C 10 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
25 mg/m<sup>3</sup> Limits for Air Contaminants

The value in mg/m<sup>3</sup> is approximate. Ceiling limit is to be determined from breathing-zone air samples.

TWA 0.5 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1 mg/m<sup>3</sup> 1910.1000

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### PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Colorless	<b>Odor:</b>	Sulfur odor added
<b>Physical State:</b>	Gas	<b>Freezing/Melting Pt.:</b>	-166.11°C (-267°F)
<b>Spec Grav./Density:</b>	.540	<b>Vapor Density:</b>	1.76
<b>Boiling Point:</b>	-34.66°C (-30.4°F)	<b>Auto-Ignition Temp:</b>	862.77°C (1585°F)
<b>Vapor Pressure:</b>	70 @ 70°F	<b>UFL/LFL:</b>	8.5% / 1.9%
<b>Evap. Rate:</b>	Rapid		

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### STABILITY AND REACTIVITY

<b>Reactivity:</b>	Contains gas under pressure; may explode if heated. Reacts with oxidants causing fire and explosion hazard.
<b>Chemical Stability:</b>	Stable under recommended handling and storage conditions.
<b>Conditions to Avoid:</b>	Direct sunlight Extremely high or low temperatures Open Flame Heat Sparks
<b>Materials to Avoid:</b>	Heat Strong Oxidizing Agents
<b>Hazardous Decomposition:</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Tip Cleaner (138-86-3) [.02%]

Information on toxicological effects acute toxicity:

LD50 Oral - rat - 5,300 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: Skin irritation - 24 h

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No components 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 components 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 components 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 components 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

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: OS8100000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Ethyl Mercaptin (75-08-1) [.28%]

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

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 components 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 components 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 components 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 components 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

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

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### ECOLOGICAL INFORMATION

Tip Cleaner (138-86-3) [.02%] Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 80 mg/l - 96.0 h. Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 17 mg/l - 48 h. other aquatic invertebrates

Persistence and degradability: no data available

Bio accumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

Ethyl Mercaptin (75-08-1) [.28%]

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

Bio accumulative 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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### DISPOSAL CONSIDERATIONS

Tip Cleaner (138-86-3) [.02%]

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.

Ethyl Mercaptin (75-08-1) [.28%]

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**

ID8000, Consumer commodity, 9

**IMDG:**

Petroleum gases, liquefied, 2.1, UN1075

Label code: 2.1

EmS-No (Fire): F-D

EmS-No. (Spillage): S-U

Marine Pollutant: No

**IATA:**

Petroleum gases, liquefied, 2.1, UN1075

Label Code: 2.1

ERG Code (IATA): 10L

Marine Pollutant: No

**15****REGULATORY INFORMATION**

Component (CAS#) [%] - CODES

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Petroleum gases, liquefied (68476-85-7) [99.7%] MASS, OSHAWAC, PA, TSCA, TXAIRRegulatory CODE Descriptions  
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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

**16****OTHER INFORMATION****Disclaimer:**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s). This information is given in good faith and based on our current knowledge of the product.

**Author:** Jeanette Akright**Publication Date:** April 20, 2016