



# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** METAL CLEANER & TARNISH REMOVER - SW-847

**Other means of identification**

**SDS number:** RE1000044196

**Recommended restrictions**

**Recommended use:** Cleaner

**Restrictions on use:** Not known.

**Manufacturer Information**

**Manufacturer**

**Company Name:** Sprayway, Inc.  
**Address:** 1000 INTEGRAM DR.  
Pacific, MO 63069  
US  
**Telephone:** 1-630-628-3000

**Emergency telephone number:** 1-866-836-8855

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable aerosol Category 1

**Health Hazards**

Skin sensitizer Category 1

**Environmental Hazards**

Acute hazards to the aquatic environment Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Extremely flammable aerosol.  
May cause an allergic skin reaction.  
Toxic to aquatic life.



### Precautionary Statements

- Prevention:** 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 dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
- Response:** IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.
- Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Butane	106-97-8	5 - <10%
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-	5989-27-5	5 - <10%
Propane	74-98-6	1 - <5%
Ethanol, 2,2',2"-nitrilotris-	102-71-6	1 - <5%
Propanol, 1(or 2)-(2-methoxymethylethoxy)-	34590-94-8	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition Comments:** The components are not hazardous or are below required disclosure limits.

The exact concentration has been withheld as a trade secret.

### 4. First-aid measures

#### Description of necessary first-aid measures

- Inhalation:** Move to fresh air.
- Skin Contact:** Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
- Eye contact:** Rinse immediately with plenty of water.
- Ingestion:** Rinse mouth thoroughly.
- Personal Protection for First-aid Responders:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.



**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Get medical attention if symptoms occur.

**5. Fire-fighting measures**

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Accidental release measures:** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

**Methods and material for containment and cleaning up:** Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

**7. Handling and storage**

**Handling**

**Technical measures (e.g. Local and general ventilation):** No data available.



**Safe handling advice:** 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 contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

**Contact avoidance measures:** No data available.

**Storage**

**Safe storage conditions:** Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 1

**Safe packaging materials:** No data available.

**Storage Temperature:** No data available.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Butane	REL	800 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	800 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Propane	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethanol, 2,2',2''-nitrotris-	TWA	5 mg/m3	US. ACGIH Threshold Limit Values, as amended
Propanol, 1(or 2)-(2-methoxymethylethoxy)-	STEL	150 ppm 900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	100 ppm 600 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	150 ppm 900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended
	REL	100 ppm 600 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	PEL	100 ppm 600 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended
Ethanol, 2,2'-iminobis-	REL	3 ppm 15 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	3 ppm 15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethanol, 2,2'-iminobis- - Inhalable fraction and vapor.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended

**Exposure guidelines**

Propanol, 1(or 2)-(2-methoxymethylethoxy)-	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
Ethanol, 2,2'-iminobis-	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.

**Appropriate Engineering Controls** No data available.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** No data available.



<b>Skin and Body Protection:</b>	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	When using do not smoke. Observe good industrial hygiene practices. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Spray Aerosol
<b>Color:</b>	No data available.
<b>Odor:</b>	No data available.
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	-104.44 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	3,447 - 4,826 hPa (20 °C)
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility in Water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Self Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>Kinematic viscosity:</b>	270 mm <sup>2</sup> /s (100 °C)
<b>Dynamic viscosity:</b>	270 mPa.s (100 °C)
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	No data available.



**Hazardous Decomposition Products:** No data available.

**11. Toxicological information**

**Information on likely routes of exposure**

**Inhalation:** No data available.  
**Skin Contact:** No data available.  
**Eye contact:** No data available.  
**Ingestion:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation:** No data available.  
**Skin Contact:** No data available.  
**Eye contact:** No data available.  
**Ingestion:** No data available.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral Product:** Not classified for acute toxicity based on available data.  
**Dermal Product:** Not classified for acute toxicity based on available data.  
**Inhalation Product:** Not classified for acute toxicity based on available data.

**Repeated dose toxicity**

**Product:** No data available.

**Components:**

Butane  
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-  
Propane  
NOAEL (Rat(Male), Oral, 13 Weeks): 600 mg/kg Oral Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study  
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

Ethanol, 2,2',2''-nitrioltris-  
Propanol, 1(or 2)-(2-methoxymethylethoxy)-  
NOAEL (Rat(Female, Male), Inhalation): 0.5 mg/l Inhalation Experimental result, Key study  
NOAEL (Rat(Female, Male), Oral, 4 Weeks): 200 mg/kg Oral Experimental result, Key study  
NOAEL (Rabbit(Female, Male), Dermal, 90 d): 2,850 mg/kg Dermal Experimental result, Key study



### Skin Corrosion/Irritation

**Product:** No data available.

#### Components:

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- in vivo (Rabbit): Not irritant  
Ethanol, 2,2',2''-nitrioltris- in vivo (Rabbit): Not irritant  
Propanol, 1(or 2)-(2-methoxymethylethoxy)- in vivo Not irritant

### Serious Eye Damage/Eye Irritation

**Product:** No data available.

#### Components:

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Rabbit, 24 - 72 hrs: Not irritating  
Propanol, 1(or 2)-(2-methoxymethylethoxy)- Rabbit, 24 - 72 hrs: Not irritating

### Respiratory or Skin Sensitization

**Product:** No data available.

#### Components:

Ethanol, 2,2',2''-nitrioltris- Skin sensitization:, in vivo (Guinea pig): Non sensitising  
Propanol, 1(or 2)-(2-methoxymethylethoxy)- Skin sensitization:, in vivo (Human): Non sensitising

### Carcinogenicity

**Product:** No data available.

### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

### US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

### Germ Cell Mutagenicity

#### In vitro

**Product:** No data available.

#### In vivo

**Product:** No data available.

### Reproductive toxicity

**Product:** No data available.

### Specific Target Organ Toxicity - Single Exposure

**Product:** No data available.

### Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.



**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Components:**

- Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- EC 50 (Pimephales promelas, 96 h): 688 µg/l Experimental result, Key study
- Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Ethanol, 2,2',2''-nitrilotris- LC 50 (Pimephales promelas, 96 h): 11,800 mg/l Experimental result, Key study
- Propanol, 1(or 2)-(2-methoxymethylethoxy)- LC 50 (96 h): > 1,000 mg/l Experimental result, Key study

**Aquatic Invertebrates**

**Product:** No data available.

**Components:**

- Butane LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
- Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- EC 50 (Daphnia magna, 48 h): 0.36 mg/l Experimental result, Key study  
NOAEL (Daphnia magna, 48 h): 0.074 mg/l Experimental result, Key study
- Ethanol, 2,2',2''-nitrilotris- EC 50 (Ceriodaphnia dubia, 48 h): 609.88 mg/l Experimental result, Key study
- Propanol, 1(or 2)-(2-methoxymethylethoxy)- LC 50 (Daphnia magna, 48 h): 1,919 mg/l Experimental result, Key study

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Components:**

- Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- NOAEL (Freshwater invertebrates, species frequently include Daphnia magna or Daphnia pulex): 0.115 mg/l QSAR QSAR, Weight of Evidence study
- Ethanol, 2,2',2''-nitrilotris- NOAEL (Daphnia magna): 250 mg/l Experimental result, Key study
- Propanol, 1(or 2)-(2-methoxymethylethoxy)- NOAEL (Daphnia magna): 0.5 mg/l Experimental result, Key study





**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**Components:**

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- 80 % (28 d) Detected in water. Read-across from supporting substance (structural analogue or surrogate), Key study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study  
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Ethanol, 2,2',2''-nitrilotris- 100 % (3 d) Sediment Experimental result, Key study

Propanol, 1(or 2)-(2-methoxymethylethoxy)- 96 % Detected in water. Experimental result, Key study

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Components:**

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Bioconcentration Factor (BCF): 864.8 Aquatic sediment QSAR, Key study

Ethanol, 2,2',2''-nitrilotris- Cyprinus carpio, Bioconcentration Factor (BCF): < 3.9 Aquatic sediment  
Experimental result, Key study

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Components:**

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- Log Kow: 4.34 - 4.46 25 °C No Experimental result, Supporting study

Ethanol, 2,2',2''-nitrilotris- Log Kow: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence  
study

**Mobility in soil:**

No data available.

**Components:**

Butane No data available.

Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)- No data available.

Propane No data available.

Ethanol, 2,2',2''-nitrilotris- No data available.

Propanol, 1(or 2)-(2-methoxymethylethoxy)- No data available.

**Other adverse effects:**

Toxic to aquatic organisms.

**13. Disposal considerations**

**Disposal instructions:**

Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:**

No data available.



## 14. Transport information

### DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
EmS No.:	–
Packing Group:	II
Special precautions for user:	Not regulated.

### IATA

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es):	
Class:	2.1
Label(s):	–
Packing Group:	–
Special precautions for user:	Not regulated.
Other information	
Passenger and cargo aircraft:	Allowed. 203
Cargo aircraft only:	Allowed. 203

### IMDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2
Label(s):	–
EmS No.:	F-D, S-U
Packing Group:	–
Special precautions for user:	Not regulated.

## 15. Regulatory information

### US Federal Regulations

**Restrictions on use:** Not known.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**  
None present or none present in regulated quantities.

### CERCLA Hazardous Substance List (40 CFR 302.4):

#### Chemical Identity

UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY  
RCRA HAZARDOUS WASTE NO. D001  
DIETHANOLAMINE

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Flammable aerosol, Skin sensitizer



**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

**US State Regulations**

**US. California Proposition 65**

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. New Jersey Worker and Community Right-to-Know Act  
Chemical Identity**

Butane  
Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-  
Propane  
Ethanol, 2,2',2''-nitrilotris-

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances  
Chemical Identity**

Butane  
9-Octadecenoic acid (9Z)-  
Propane  
Ethanol, 2,2',2''-nitrilotris-

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable



**Inventory Status:**

Australia AICS	Not in compliance with the inventory.
Canada DSL Inventory List	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.
Japan (ENCS) List	Not in compliance with the inventory.
China Inv. Existing Chemical Substances	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	Not in compliance with the inventory.
Canada NDSL Inventory	Not in compliance with the inventory.
Philippines PICCS	Not in compliance with the inventory.
New Zealand Inventory of Chemicals	Not in compliance with the inventory.
Japan ISHL Listing	Not in compliance with the inventory.
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Mexico INSQ	Not in compliance with the inventory.
Ontario Inventory	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory	On or in compliance with the inventory
US TSCA Inventory	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

**Issue Date:** 11/19/2020

**Revision Information:** No data available.

**Version #:** 1.0

**Further Information:** No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.