



## SAFETY DATA SHEET

### VOC - VOC FREE FLUX REMOVER - ULTRACLEAN, AEROSOL

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

**Product name** VOC - VOC FREE FLUX REMOVER - ULTRACLEAN, AEROSOL

**Product number** MCC-VOC10A, MCC-VOC10Y

##### Recommended use of the chemical and restrictions on use

**Uses advised against** No specific uses advised against are identified.

##### Details of the supplier of the safety data sheet

**Supplier** MICROCARE LLC

**Manufacturer** MICROCARE LLC  
595 John Downey Drive  
New Britain, CT 06051  
United States of America  
CAGE: OATV9  
Tel: + 1 800 638 0125, +1 860-827-0626  
techsupport@microcare.com

##### Emergency telephone number

**Emergency telephone** INFOTRAC 1-800-535-5053 (U.S.A. and CANADA)  
1-352-323-3500 (from anywhere in the world)

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Flam. Aerosol 1 - H222

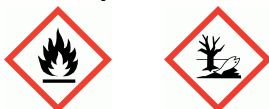
**Health hazards** Not Classified

**Environmental hazards** Aquatic Acute 1 - H400

**Physicochemical** H229 Pressurised container: may burst if heated Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

##### Label elements

##### Hazard symbols



**Signal word** Danger

**Hazard statements** H222 Extremely flammable aerosol.  
H400 Very toxic to aquatic life.

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**Precautionary statements**

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Pressurized container: Do not pierce or burn, even after use  
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.  
 P501 Dispose of contents/ container in accordance with local regulations.

**Supplemental label information**

Safety data sheet available on request. For use in industrial installations only.

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

<b>DIMETHYL CARBONATE</b>	<b>30-60%</b>
CAS number: 616-38-6	
<b>Classification</b>	
Flam. Liq. 2 - H225	
<b>HEXAMETHYLDISILOXANE (Methyl siloxane)</b>	<b>10-30%</b>
CAS number: 107-46-0	
M factor (Acute) = 1	
<b>Classification</b>	
Flam. Liq. 2 - H225	
Aquatic Acute 1 - H400	
Aquatic Chronic 2 - H411	
<b>TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE</b>	<b>10-30%</b>
CAS number: 29118-24-9	
<b>Classification</b>	
Press. Gas, Liquefied - H280	

The full text for all hazard statements is displayed in Section 16.

**Composition comments**

TSCA: The ingredients of this product are on the TSCA Inventory. The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200

### Composition

### 4. First-aid measures

#### Description of first aid measures

**General information**

If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

**Inhalation**

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

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<b>Ingestion</b>	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
<b>Skin Contact</b>	Rinse with water.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Spray/mists may cause respiratory tract irritation.
<b>Ingestion</b>	Due to the physical nature of this product, it is unlikely that ingestion will occur.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	May be slightly irritating to eyes. May cause discomfort.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

### Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Vapors may form explosive mixtures with air.
<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
<b>Advice for firefighters</b>	
<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapors and spray/mists.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store away from incompatible materials (see Section 10). Keep away from oxidizing materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F.

**Storage class** Miscellaneous hazardous material storage.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

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### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

#### DIMETHYL CARBONATE

No information available that would effect occupational exposure limit values.

#### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

#### Hand protection

No specific hand protection recommended. Avoid contact with skin.

#### Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

#### Hygiene measures

Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

#### Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

#### Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Liquid. Aerosol.
Color	Clear liquid. Colorless.
Odor	Slight. Ether.
Odor threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	85°C/187°F @ 101.3 kPa
Flash point	3.0°C/37°F Method: Tag closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.

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<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.25 %(V) Upper flammable/explosive limit: 18.6 %(V)
<b>Other flammability</b>	No information available.
<b>Vapor pressure</b>	0.79 kPa @ 20°C
<b>Vapor density</b>	> 1.0
<b>Relative density</b>	No information available.
<b>Bulk density</b>	0.850
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	There are no chemical groups present in the product that are associated with oxidizing properties.
<b>Comments</b>	Aerosol.
<b>Global Warming Potential (GWP)</b>	
<b>Surface tension</b>	
<b>Refractive index</b>	No information available.
<b>Particle size</b>	Not applicable.
<b>Molecular weight</b>	Not applicable.
<b>Volatility</b>	100%
<b>Saturation concentration</b>	No information available.
<b>Critical temperature</b>	No information available.
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 0 g/litre.
<b>Heat of vaporization (at boiling point), cal/g (Btu/lb)</b>	

### 10. Stability and reactivity

<b>Reactivity</b>	See the other subsections of this section for further details.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	The following materials may react strongly with the product: Oxidizing agents.
<b>Conditions to avoid</b>	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated

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<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

##### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

##### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

##### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

##### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

##### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

##### **IARC carcinogenicity**

None of the ingredients are listed or exempt.

##### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

##### **Reproductive toxicity - development**

Based on available data the classification criteria are not met.

##### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

##### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

##### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

##### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

##### **Inhalation**

Spray/mists may cause respiratory tract irritation.

##### **Ingestion**

Due to the physical nature of this product, it is unlikely that ingestion will occur.

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<b>Skin Contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	May be slightly irritating to eyes. May cause discomfort.
<b>Route of exposure</b>	Ingestion Inhalation Skin and/or eye contact
<b>Target Organs</b>	No specific target organs known.

### Toxicological information on ingredients.

#### DIMETHYL CARBONATE

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 140.0

ATE inhalation (vapours mg/l) 140.0

#### HEXAMETHYLDISILOXANE (Methyl siloxane)

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 106.0

Species Rat

#### TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 207,000.0

Species Rat

ATE inhalation (vapours mg/l) 207,000.0

### 12. Ecological information

<b>Ecotoxicity</b>	Not known.
<b>Toxicity</b>	Aquatic Acute 1 - H400 Very toxic to aquatic life.

### Ecological information on ingredients.

#### DIMETHYL CARBONATE

##### Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 1000 mg/l, Leuciscus idus (Golden orfe)

#### HEXAMETHYLDISILOXANE (Methyl siloxane)

Toxicity Very toxic to aquatic organisms.

##### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.1 < L(E)C<sub>50</sub> ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 0.46 mg/l mg/l, Fish



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**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 72 hours: 0.79 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: > 0.93 mg/l, Selenastrum capricornutum

### TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

#### Acute aquatic toxicity

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >160 mg/l, Daphnia magna

#### Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

#### Ecological information on ingredients.

### DIMETHYL CARBONATE

**Persistence and degradability** The product is readily biodegradable.

### TRANS-1,3,3,3-TETRAFLUOROPROP-1-ENE

**Persistence and degradability** The product is not readily biodegradable.

#### Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** No information available.

#### Ecological information on ingredients.

### DIMETHYL CARBONATE

**Partition coefficient** log Pow: 0.23

#### Mobility in soil

**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

#### Other adverse effects

**Other adverse effects** None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

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### Disposal methods

Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents.

### 14. Transport information

#### UN proper shipping name

Proper shipping name (TDG) LIMITED QUANTITY

Proper shipping name (IMDG) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

Proper shipping name (ICAO) UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

Proper shipping name (DOT) LIMITED QUANTITY

#### Environmental hazards

Environmentally Hazardous Substance



#### Special precautions for user

EmS F-D, S-U

### 15. Regulatory information

#### US Federal Regulations

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Not listed.

SARA 313 Emission Reporting

Not listed.

CAA Accidental Release Prevention

Not listed.

SARA (311/312) Hazard Categories

Acute  
Chronic  
Fire  
Pressure

#### US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Not listed.

California Air Toxics "Hot Spots" (A-I)

Not listed.

California Directors List of Hazardous Substances

Not listed.

Massachusetts "Right To Know" List

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*DIMETHYL CARBONATE*

Present.

**Rhode Island "Right To Know" List**

Not listed.

**Minnesota "Right To Know" List**

Not listed.

**New Jersey "Right To Know" List**

*DIMETHYL CARBONATE*

Present.

**Pennsylvania "Right To Know" List**

*DIMETHYL CARBONATE*

Present.

### Inventories

**Canada - DSL/NDSL**

DSL

**US - TSCA**

All the ingredients are listed.

### 16. Other information

<b>Revision date</b>	6/1/2021
<b>Revision</b>	37
<b>Supersedes date</b>	9/9/2020
<b>SDS No.</b>	AEROSOL - VOC
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.