# SAFETY DATA SHEET
# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

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

## 1. Identification

### Product identifier

**Product name** VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

**Product number** MCC-VOCL, MCC-VOCG, MCC-VOCP, MCC-VOCD, MCC-VOCGL, MCC-VOCGG

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

**Application** Cleaning agent.

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

**Supplier** MICROCARE CORPORATION

**Manufacturer** MICROCARE CORPORATION
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: + 1 800 638 0125, +1 860-827-0626
Fax: +1 860-827-8105
techsupport@microcare.com

### Emergency telephone number

**Emergency telephone** CHEMTREC 1-800-424-9300 (within the U.S.)
+1 703-741-5970 (from anywhere in the world)

## 2. Hazard(s) identification

### Classification of the substance or mixture

**OSHA Regulatory Status** This Product is Hazardous under the OSHA Hazard Communication Standard.

**Physical hazards** Flam. Liq. 1 - H224

**Health hazards** Not Classified

**Human health** Splashes in the eyes may cause redness and irritation. Keep out of the reach of children. See Section 11 for additional information on health hazards.

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

### Label elements

**Pictogram**

**Signal word** Danger

# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

**Hazard statements** H224 Extremely flammable liquid and vapor.

**Precautionary statements** P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national 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**

**HEXAMETHYLDISILOXANE (Methyl siloxane)** **60-100%**

CAS number: 107-46-0

**Classification**
Flam. Liq. 2 - H225
Not relevant.

**DIMETHYL CARBONATE** **30-60%**

CAS number: 616-38-6

**Classification**
Flam. Liq. 2 - H225

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** Promptly remove any clothing that becomes wet or contaminated. Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Inhalation** Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.

**Ingestion** Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Consult a physician for specific advice.

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**Skin Contact** Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.

**Eye contact** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

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

**Inhalation** Vapors may cause headache, fatigue, dizziness and nausea.

**Ingestion** May cause stomach pain or vomiting. Headache.

**Skin contact** Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

**Eye contact** Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. Irritation and redness, followed by blurred vision.

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

**Notes for the doctor** Treat symptomatically. No specific recommendations. If in doubt, get medical attention promptly.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

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

### Special hazards arising from the substance or mixture

**Specific hazards** Closed containers can burst violently when heated, due to excess pressure build-up. Oxides of carbon. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3.

**Hazardous combustion products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

### Advice for firefighters

**Protective actions during firefighting** Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapors. Bursting aerosol containers may be propelled from a fire at high speed.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

### Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

### Methods and material for containment and cleaning up

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**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. If leakage cannot be stopped, evacuate area. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers.

**Reference to other sections** See Section 11 for additional information on health hazards.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Ground container and transfer equipment to eliminate sparks from static electricity.

### Specific end uses(s)

**Specific end use(s)** Cleaning agent.

**Reference to other sections.** Store away from incompatible materials (see Section 10).

## 8. Exposure Controls/personal protection

### Control parameters

### Occupational exposure limits

Hexamethyldisiloxane TWA 200 ppm DCC OEL:
DCC OEL = Dow Corning Guide,
DCC OEL/TWA = Time weighted average

**DIMETHYL CARBONATE**

No information available that would effect occupational exposure limit values.

**Additional Occupational Exposure Limits**

**Ingredient comments** WEL = Workplace Exposure Limits

### Exposure controls

**Protective equipment**

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation.

**Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

**Hand protection** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

**Other skin and body protection** Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

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| | |
|---|---|
| **Hygiene measures** | Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. |
| **Respiratory protection** | No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. |

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Liquid. |
| **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°C/37°F Tag closed cup. |
| **Evaporation rate** | No information available. |
| **Evaporation factor** | No information available. |
| **Flammability (solid, gas)** | Not applicable. |
| **Upper/lower flammability or explosive limits** | Lower flammable/explosive limit: 1.25 %(V) Upper flammable/explosive limit: 18.6 %(V) |
| **Other flammability** | No information available. |
| **Vapor pressure** | 5.95 kPa @ 20°C |
| **Vapor density** | > 1.0 |
| **Relative density** | No information available. |
| **Bulk density** | 0.850 |
| **Solubility(ies)** | Insoluble in water. |
| **Partition coefficient** | No information available. |
| **Auto-ignition temperature** | Not determined. |
| **Decomposition Temperature** | No information available. |
| **Viscosity** | No information available. |
| **Explosive properties** | No information available. |
| **Oxidizing properties** | There are no chemical groups present in the product that are associated with oxidizing properties. |
| **Refractive index** | No information available. |
| **Particle size** | No information available. |
| **Molecular weight** | Not applicable. |
| **Volatility** | 100% |

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| | |
|---|---|
| **Saturation concentration** | No information available. |
| **Critical temperature** | No information available. |
| **Volatile organic compound** | This product contains a maximum VOC content of 0 g/litre. |
| **Flammability** | The product is flammable. |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | There are no known reactivity hazards associated with this product. |
| **Stability** | Stable at normal ambient temperatures. |
| **Possibility of hazardous reactions** | Will not polymerize. |
| **Conditions to avoid** | Avoid heat, flames and other sources of ignition. |
| **Materials to avoid** | Strong oxidizing agents. Strong alkalis. Strong mineral acids. |
| **Hazardous decomposition products** | Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Vapors/gases/fumes of: Silicon dioxide Formaldehyde |

## 11. Toxicological information

### Information on toxicological effects

| | |
|---|---|
| **Other health effects** | There is no evidence that the product can cause cancer. |
| **Inhalation** | May cause respiratory system irritation. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system. |
| **Ingestion** | No harmful effects expected from quantities likely to be ingested by accident. |
| **Skin Contact** | Product has a defatting effect on skin. May cause skin irritation/eczema. |
| **Eye contact** | Irritating to eyes. |

### Toxicological information on ingredients.

**HEXAMETHYLDISILOXANE (Methyl siloxane)**

**Acute toxicity - inhalation**

| | |
|---|---|
| **Acute toxicity inhalation ($LC_{50}$ vapours mg/l)** | 106.0 |
| **Species** | Rat |

**DIMETHYL CARBONATE**

**Acute toxicity - inhalation**

| | |
|---|---|
| **Acute toxicity inhalation ($LC_{50}$ vapours mg/l)** | 140.0 |
| **ATE inhalation (vapours mg/l)** | 140.0 |

## 12. Ecological Information

# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

**Ecotoxicity** Not known.

**Toxicity** Very toxic to aquatic organisms.

**Ecological information on ingredients.**

**HEXAMETHYLDISILOXANE (Methyl siloxane)**

**Toxicity** Very toxic to aquatic organisms.

**Acute aquatic toxicity**

**Acute toxicity - fish** $LC_{50}$, 96 hours: 0.46 mg/l mg/l, Fish

**Acute toxicity - aquatic invertebrates** $EC_{50}$, 72 hours: 0.79 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** $EC_{50}$, 96 hours: > 0.93 mg/l, Selenastrum capricornutum

**DIMETHYL CARBONATE**

**Acute aquatic toxicity**

**Acute toxicity - fish** $LC_{50}$, 96 hours: 1000 mg/l, Leuciscus idus (Golden orfe)

**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.

**Bioaccumulative potential**

**Bio-Accumulative Potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

**Partition coefficient** No information available.

**Ecological information on ingredients.**

**DIMETHYL CARBONATE**

**Partition coefficient** log Pow: 0.23

**Mobility in soil**

**Mobility** Not considered to be a significant hazard due to the small quantities used.

**Other adverse effects**

**Other adverse effects** None known.

## 13. Disposal considerations

**Waste treatment methods**

**General information** Reuse or recycle products wherever possible.

**Disposal methods** Empty containers must not be punctured or incinerated because of the risk of an explosion. Reuse or recycle products wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

## 14. Transport information

### UN Number

| | |
|---|---|
| **UN No. (IMDG)** | 1993 |
| **UN No. (ICAO)** | 1993 |

### UN proper shipping name

| | |
|---|---|
| **Proper shipping name (TDG)** | UN1993, Flammable Liquids N.O.S. Hexamethyldisiloxane (Methyl Siloxane), 3, PGII |
| **Proper shipping name (IMDG)** | UN1993, Flammable Liquids N.O.S. Hexamethyldisiloxane (Methyl Siloxane), 3, PGII |
| **Proper shipping name (ICAO)** | UN1993, Flammable Liquids N.O.S. Hexamethyldisiloxane (Methyl Siloxane), 3, PGII |
| **Proper shipping name (DOT)** | UN1993, Flammable Liquids N.O.S. Hexamethyldisiloxane (Methyl Siloxane), 3, PGII |

### Transport hazard class(es)

| | |
|---|---|
| **TDG class** | 3 |
| **TDG label(s)** | 3 |
| **IMDG Class** | 3 |
| **ICAO class/division** | 3 |

**Transport labels**


### Packing group

| | |
|---|---|
| **TDG Packing Group** | II |
| **IMDG packing group** | II |
| **ICAO packing group** | II |
| **DOT packing group** | II |

### Environmental hazards

**Environmentally Hazardous Substance**

### Special precautions for user

| | |
|---|---|
| **EmS** | F-E, S-E |
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. |

## 15. Regulatory information

### US Federal Regulations

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

Not listed.

# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**
Not listed.

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**
Not listed.

**SARA 313 Emission Reporting**
Not listed.

**CAA Accidental Release Prevention**
Not listed.

**SARA (311/312) Hazard Categories**
Acute
Chronic
Fire

**OSHA Highly Hazardous Chemicals**
Not listed.

## US State Regulations

**California Proposition 65 Carcinogens and Reproductive Toxins**
Not listed.

**California Air Toxics "Hot Spots" (A-I)**
Not listed.

**California Air Toxics "Hot Spots" (A-II)**
Not listed.

**California Directors List of Hazardous Substances**
Not listed.

**Massachusetts "Right To Know" List**

*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**
Yes

# VOC-VOC FREE FLUX REMOVER-ULTRACLEAN-BULK

### US - TSCA
All the ingredients are listed.

### US - TSCA 12(b) Export Notification
Not listed.

## 16. Other information

| | |
|---|---|
| **Revision comments** | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| **Revision date** | 5/31/2018 |
| **Revision** | 17 |
| **Supersedes date** | 2/28/2018 |
| **SDS No.** | BULK - VOC |
| **SDS status** | Approved. |
| **Hazard statements in full** | H224 Extremely flammable liquid and vapor.<br>H225 Highly flammable liquid and vapor. |