SAFETY DATA SHEET
DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

1. Identification

Product identifier
Product name DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL
Product number MCC-DC1101, MCC-DC1105, MCC-DC1, MCC-DC110Y
Synonyms; trade names "DC1 - VeriClean Defluxer/Degreaser, Plastic Safe"

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: +1 860-827-0626
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. Aerosol 1 - H222
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

1/10
DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.

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 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.

HFC-134a Tetrafluoroethane 10-30%
CAS number: 811-97-2

Classification
Press. Gas, Liquefied - H280

1-METHOXY-2-PROPA NOL 5-10%
CAS number: 107-98-2

Classification
Flam. Liq. 3 - H226
STOT SE 3 - H336

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.
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**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.

**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**
No specific recommendations. If in doubt, get medical attention promptly.

**5. Fire-fighting measures**

**Extinguishing media**
Suitable extinguishing 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**
Containers can burst violently or explode when heated, due to excessive pressure build-up. Containers can burst violently or explode when heated, due to excessive 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**
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**
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Environmental precautions
Do not discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

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
Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

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
HFC-134a Tetrafluoroethane
Long-term exposure limit (8-hour TWA): OES 4240 mg/m³
Short-term exposure limit (15-minute): OES

1-METHOXY-2-PROPANOL
Long-term exposure limit (8-hour TWA): ACGIH 50 ppm 184 mg/m³
Short-term exposure limit (15-minute): ACGIH 100 ppm 369 mg/m³
A4

ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.

Additional Occupational Exposure Limits

Ingredient comments
WEL = Workplace Exposure Limits

Exposure controls

Protective equipment

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

**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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Clear liquid. Colorless.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Slight. Ether.</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Initial boiling point and range</strong></td>
<td>98°C/210°F @ 101.3 kPa</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>-4.0°C/24°F TCC (Tag closed cup).</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Evaporation factor</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Upper flammable/explosive limit: 18.6 %(V) Lower flammable/explosive limit: 1.25 %(V)</td>
</tr>
<tr>
<td><strong>Other flammability</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>5.95 kPa @ 25°C</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>&gt; 1.0</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>0.88 @ unspecified°C</td>
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<tr>
<td><strong>Bulk density</strong></td>
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<tr>
<td><strong>Solubility(ies)</strong></td>
<td>Insoluble in water.</td>
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<tr>
<td><strong>Partition coefficient</strong></td>
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<td><strong>Decomposition Temperature</strong></td>
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<tr>
<td><strong>Viscosity</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>No information available.</td>
</tr>
</tbody>
</table>
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Oxidizing properties
There are no chemical groups present in the product that are associated with oxidizing properties.

Comments
Aerosol.

Refractive index
No information available.

Particle size
No information available.

Molecular weight
Not applicable.

Vapor
100%

Saturation concentration
No information available.

Critical temperature
No information available.

Volatile organic compound
This product contains a maximum VOC content of 87 g/litre.

Flammability
Flammable aerosol.

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

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

<table>
<thead>
<tr>
<th>Acute toxicity inhalation (LC₅₀ vapours mg/l)</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>106.0</td>
<td>Rat</td>
</tr>
</tbody>
</table>
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HFC-134a Tetrafluoroethane

Other health effects
There is no evidence that the product can cause cancer.

Acute toxicity - inhalation
Acute toxicity inhalation (LC₅₀ gases ppmV)
Species Rat
ATE inhalation (gases ppm)

567,000.0

12. Ecological Information

Ecotoxicity
Not known.

Toxicity
Very toxic to aquatic organisms.

Ecological information on ingredients.

HEXAMETHYLDISILOXANE (Methyl siloxane)

Toxicity
Very toxic to aquatic organisms.

Acute toxicity - fish
LC₅₀, 96 hours: 0.46 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC₅₀, 72 hours: 0.79 mg/l, Daphnia magna

Acute toxicity - aquatic plants
EC₅₀, 96 hours: > 0.93 mg/l, Selenastrum capricornutum

HFC-134a Tetrafluoroethane

Acute toxicity - fish
LC₅₀, 96 hours: 450 mg/l, Fish

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 980 mg/l, Daphnia magna

Persistence and degradability

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

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.

HFC-134a Tetrafluoroethane

Partition coefficient
Pow: 1.06

Mobility in soil

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

Other adverse effects

Other adverse effects
The product contains a substance which has a photochemical ozone creation potential.
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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.

14. Transport information

UN Number

UN No. (IMDG) 1950
UN No. (ICAO) 1950

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

Transport hazard class(es)

IMDG Class 2.1 LIMITED QUANTITY
ICAO class/division 2.1 LIMITED QUANTITY

Packing group

TDG Packing Group N/A
IMDG packing group N/A
ICAO packing group N/A
DOT packing group N/A

Environmental hazards

Environmentally Hazardous Substance

Special precautions for user

EmS F-D, S-U

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.
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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
Fire
Pressure

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)
1-METHOXY-2-PROPA-NOL
Present.

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

California Directors List of Hazardous Substances
1-METHOXY-2-PROPA-NOL
Present.

Massachusetts "Right To Know" List
1-METHOXY-2-PROPA-NOL
Present.

Rhode Island "Right To Know" List
1-METHOXY-2-PROPA-NOL
Present.

Minnesota "Right To Know" List
HFC-134a Tetrafluoroethane
Present.
1-METHOXY-2-PROPA-NOL
Present.

New Jersey "Right To Know" List
1-METHOXY-2-PROPA-NOL
Present.
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Pennsylvania "Right To Know" List
1-METHOXY-2-PROpanol
Present.

Inventories
Canada - DSL/NDSL
All the ingredients are listed or exempt.

US - TSCA
Yes

16. Other information

Revision comments
NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 6/23/2017
Revision 61
Supersedes date 4/5/2017
SDS No. AEROSOL - DC1
SDS status Approved.

Hazard statements in full
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H280 Contains gas under pressure; may explode if heated.
H336 May cause drowsiness or dizziness.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.