

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

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

#### 1. Identification

**Product identifier** 

Product name DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Product number MCC-DC1, MCC-DC110Y, MCC-DC115A

Synonyms; Common Names "DC1 - VeriClean Defluxer/Degreaser, Plastic Safe"

Recommended use of the chemical and restrictions on use

Restriction on use Cleaning agent.

**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 (CANADA and U.S.A.)

1-352-323-3500 (from anywhere in the world)

## 2. Hazard identification

## Classification of the substance or mixture

WHMIS Regulatory Status This product has been classified according to the hazard criteria of the Hazardous Product

Regulations and the SDS contains all required information.

Physical hazards Flam. Aerosol 1 - H222

Health hazards Not Classified

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

Label elements

Hazard pictograms





Signal word Danger

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Hazard statements H222 Extremely flammable aerosol.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P211 Do not spray on an open flame or other ignition source.

P251 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

EUH210 Safety data sheet available on request. RCH001a For use in industrial installations

**information** only.

Other hazards

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

## 3. Composition/information on ingredients

#### **Mixtures**

#### **HEXAMETHYLDISILOXANE** (Methyl siloxane)

65-85% Trade secret

CAS number: 107-46-0 M factor (acute) = 1

#### Classification

Flam. Liq. 2 - H225 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

#### HFC-134a Tetrafluoroethane

10-30%

CAS number: 811-97-2

#### Classification

Press. Gas, Liquefied - H280 Simple Asphyxiants - Category 1

#### 1-METHOXY-2-PROPANOL

7-13% Trade secret

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

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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.

Ingestion Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not

induce vomiting unless under the direction of medical personnel.

**Skin contact** Rinse with water.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical

attention if any discomfort continues.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

#### 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** Spray/mists may cause respiratory tract irritation.

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

Skin contact Repeated exposure may cause skin dryness or cracking.

**Eye contact** May be slightly irritating to eyes. May cause discomfort.

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

#### 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media 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.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the hazardous product

**Specific hazards**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. Vapours may form explosive mixtures with air.

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances:

Harmful gases or vapours.

#### Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours. 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 vapours 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.

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

## Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

#### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

#### 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

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. Avoid discharge to the aquatic environment. 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. 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 vapours and spray/mists.

## Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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 use(s)

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

#### 8. Exposure controls/Personal protection

#### Control parameters

## Occupational exposure limits

#### HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m<sup>3</sup>

#### 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.

#### **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 the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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.

Colour Clear. Colourless.

Odour Slight. Ether.
pH Not available.

**Melting point** -59°C/-74°F Estimated value.

Initial boiling point and range 98°C/210°F @ 101.3 kPa

Flash point -4.0°C/24°F Tag closed cup.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Upper flammable/explosive limit: 18.6 %(V) Lower flammable/explosive limit: 1.25 %(V)

Vapour pressure 5.95 kPa @ 25°C

Vapour density > 1.0

Relative density 0.88 @ unspecified°C

Solubility(ies) Insoluble in water.

Partition coefficient log Pow: > 4

**Auto-ignition temperature** 340°C/644°F

**Decomposition Temperature** Not available.

Viscosity Not available.

**Global Warming Potential** 

(GWP)

Surface tension

Volatility 100%

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

Heat of vaporization (at boiling

point), cal/g (Btu/lb)

## 10. Stability and reactivity

**Reactivity** See the other subsections of this section for further details.

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Possibility of hazardous

reactions

The following materials may react strongly with the product: Oxidizing agents.

Conditions to avoid Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurized

container: may burst if heated

Materials to avoid No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

#### 11. Toxicological information

#### Information on toxicological effects

Acute toxicity - oral

Notes (oral LD50) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Based on available data the classification criteria are not met. Notes (dermal LD₅₀)

Acute toxicity - inhalation

Notes (inhalation LC50) 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

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

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 -

Based on available data the classification criteria are not met.

development

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.

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact May be slightly irritating to eyes. May cause discomfort.

Route of exposure Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

Toxicological information on ingredients

HEXAMETHYLDISILOXANE (Methyl siloxane)

Acute toxicity - inhalation

Acute toxicity inhalation

106.0

(LC50 vapours mg/l)

Species Rat

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)

567,000.0

Species Rat

ATE inhalation (gases

ppmV)

567,000.0

**Inhalation** Vapours irritate the respiratory system. May cause coughing and difficulties in

breathing.

**Ingestion** May cause stomach pain or vomiting. May cause nausea, headache, dizziness and

intoxication.

**Skin contact** May cause allergic contact eczema. Contact with liquid form may cause frostbite.

**Eye contact** May cause temporary eye irritation.

12. Ecological information

**Toxicity** Aquatic Acute 1 - H400 Very toxic to aquatic life.

Ecological information on ingredients

HEXAMETHYLDISILOXANE (Methyl siloxane)

**Toxicity** Very toxic to aquatic organisms.

Acute aquatic toxicity

**LC50/EC50**  $0.1 < L(E)C50 \le 1$ 

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

M factor (acute) 1

Acute toxicity - fish LC₅o, 96 hours: 0.46 mg/l mg/l, Fish

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 72 hours: 0.79 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅o, 96 hours: > 0.93 mg/l, Selenastrum capricornutum

HFC-134a Tetrafluoroethane

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 450 mg/l, Fish

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 980 mg/l, Daphnia magna

Persistence and degradability

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

Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

Partition coefficient log Pow: > 4

**Ecological information on ingredients** 

HFC-134a Tetrafluoroethane

Partition coefficient Pow: 1.06

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.

**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** number

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

**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/marine pollutant



## Special precautions for user

**EmS** F-D, S-U

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

#### 15. Regulatory information

#### Inventories

Canada - DSL/NDSL

DSL

US - TSCA

Present.

### US - TSCA 12(b) Export Notification

Not listed.

## 16. Other information

Classification abbreviations Aerosol = Aerosol

and acronyms Aquatic Acute = Hazardous to the aquatic environment (acute)

**Training advice** Only trained personnel should use this material.

## DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Revision date 2021-06-01

Revision 16

Supersedes date 2021-06-01

SDS number AEROSOL - DC1

Hazard statements in full H222 Extremely flammable aerosol.

 ${\sf H225}$  Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects. May displace oxygen and cause rapid suffocation.

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.