

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

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

#### 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



## 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-PROPANOL

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 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 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

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

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 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

#### HFC-134a Tetrafluoroethane

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

Short-term exposure limit (15-minute): OES

#### 1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm  $184 \text{ mg/m}^3$  Short-term exposure limit (15-minute): ACGIH 100 ppm  $369 \text{ mg/m}^3$ 

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

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 98°C/210°F @ 101.3 kPa

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

**Evaporation rate** No information available.

**Evaporation factor** No information available.

Flammability (solid, gas) No information available.

Upper/lower flammability or

explosive limits

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

Other flammability No information available.

Vapor pressure 5.95 kPa @ 25°C

Vapor density > 1.0

Relative density 0.88 @ unspecified°C

Bulk density No information available.

Solubility(ies) Insoluble in water.

Partition coefficientNo information available.Decomposition TemperatureNo information available.ViscosityNo information available.

**Explosive properties** No information available.

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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.

Volatility 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 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.

106.0

**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<sub>50</sub> vapours mg/l)

**Species** Rat

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

#### 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

567,000.0

ppm)

#### 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 LC<sub>50</sub>, 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 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

**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.

## 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 Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## 15. Regulatory information

#### **US Federal Regulations**

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

Not listed.

#### 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-PROPANOL

Present.

#### California Air Toxics "Hot Spots" (A-II)

Not listed.

## California Directors List of Hazardous Substances

1-METHOXY-2-PROPANOL

Present.

#### Massachusetts "Right To Know" List

1-METHOXY-2-PROPANOL

Present.

## Rhode Island "Right To Know" List

1-METHOXY-2-PROPANOL

Present.

#### Minnesota "Right To Know" List

HFC-134a Tetrafluoroethane

Present.

1-METHOXY-2-PROPANOL

Present.

#### New Jersey "Right To Know" List

1-METHOXY-2-PROPANOL

Present.

#### 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.