



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-DC1, MCC-DC110Y, MCC-DC115A
Synonyms; trade names "DC1 - VeriClean Defluxer/Degreaser, Plastic Safe"

Recommended use of the chemical and restrictions on use

Application Cleaning agent.
Uses advised against No specific uses advised against are identified.

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: +1 860-893-1930
 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)

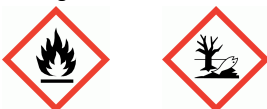
2. Hazard(s) identification

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
Environmental hazards Aquatic Acute 1 - H400

Label elements

Pictogram



Signal word Danger

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

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, 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	
M factor (Acute) = 1	
Classification	
Flam. Liq. 2 - H225	
Aquatic Acute 1 - H400	
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

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.

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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 immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

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.

Special hazards arising from the substance or mixture

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. Vapors may form explosive mixtures with air.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
Advice for firefighters	
Protective actions during firefighting	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.
Special protective equipment for firefighters	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

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

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. 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. 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.

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

HFC-134a Tetrafluoroethane

Long-term exposure limit (8-hour TWA): OES 4240 mg/m³

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

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.
Color	Clear. Colorless.
Odor	Slight. Ether.
Initial boiling point and range	98°C/210°F @ 101.3 kPa
Flash point	-4.0°C/24°F Tag closed cup.

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 18.6 %(V) Lower flammable/explosive limit: 1.25 %(V)
Vapor pressure	5.95 kPa @ 25°C
Vapor density	> 1.0
Relative density	0.88 @ unspecified°C
Solubility(ies)	Insoluble in water.
Volatility	100%
Volatile organic compound	This product contains a maximum VOC content of 87 g/litre.

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.
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. Pressurised 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 vapors.

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

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

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

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
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.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
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.
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 567,000.0
(LC₅₀ gases ppmV)

Species Rat

ATE inhalation (gases 567,000.0
ppm)

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Inhalation	Vapors 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.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
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

HFC-134a Tetrafluoroethane

<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 450 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 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 No data available on bioaccumulation.

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.

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

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.

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

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

None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

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

The following ingredients are listed or exempt:

1-METHOXY-2-PROPANOL

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

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

1-METHOXY-2-PROPANOL

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

1-METHOXY-2-PROPANOL

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

1-METHOXY-2-PROPANOL

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

DC1 - NO-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL*HFC-134a Tetrafluoroethane**1-METHOXY-2-PROPANOL***New Jersey "Right To Know" List**

The following ingredients are listed or exempt:

*1-METHOXY-2-PROPANOL***Pennsylvania "Right To Know" List**

The following ingredients are listed or exempt:

*1-METHOXY-2-PROPANOL***Inventories****Canada - DSL/NDSL**

DSL

US - TSCA

Present.

US - TSCA 12(b) Export Notification

Not listed.

16. Other information

Classification abbreviations and acronyms	Aerosol = Aerosol Aquatic Acute = Hazardous to the aquatic environment (acute)
Training advice	Only trained personnel should use this material.
Revision date	12/28/2018
Revision	6
Supersedes date	11/7/2018
SDS No.	AEROSOL - DC1
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. H400 Very toxic to aquatic life.

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.