Revision Date 07/31/2013 Revision 9

Revision 9

Supersedes Date 07/15/2013

SAFETY DATA SHEET
DC1 - N0-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

1. IDENTIFICATION

Product Name DC1 - N0-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Product No. MCC-DC1101, MCC-DC1105, MCC-DC1

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

Identification No. UN1950

Identified uses Cleaning agent.

Supplier

MicroCare Corporation
595 John Downey Drive
New Britain, CT 06019
United States of America
Toll Free: 1-800-638-0125
Tel: 1-860-827-0626
Web: www.MicroCare.com
email: techsupport@microcare.com

www.MicroCare.com

Emergency Telephone CHEMTREC (800) 424-9300

2. HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW

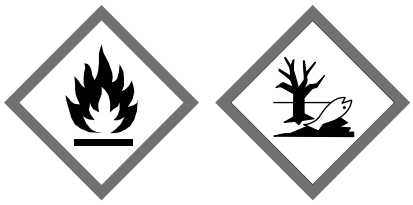
FLAMMABLE. Aerosol containers can explode when heated, due to excessive pressure build-up. Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Keep out of the reach of children.

Appearance Liquid

Color Clear Colourless.

Odor Slight odor. Ether.

GHS Pictogram



Signal Word Danger

Hazard Statements

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

Precautionary Statements

P210	Keep away from heat/sparks/open flames/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.
P273	Avoid release to the environment.
P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501	Dispose of contents/container in accordance with local regulations.

DC1 - N0-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

GHS Classification

Physical and Chemical Hazards	Flam. Aerosol 1 - H222
Human health	Not classified.
Environment	Aquatic Acute 1 - H400

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

WHMIS Label

Compressed Gas.

Flammable Gas.

Materials Causing Other Toxic Effects.

Controlled Product Classification

Canadian WHMIS Classification A B5 D2A D2B WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

OSHA Regulatory Status

This Product is Hazardous under the OSHA Hazard Communication Standard.

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.

Inhalation

May cause irritation to the respiratory system. Vapors may cause headache, fatigue, dizziness and nausea. Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion

No harmful effects expected in amounts 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.

Other Health Effects

This substance has no evidence of carcinogenic properties.

Physical And Chemical Hazards

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

1-METHOXY-2-PROPANOL	**1-5%**
CAS No.: 107-98-2	**EC No.: 203-539-1**
GHS Classification Flam. Liq. 3 - H226; STOT SE 3 - H336	

HEXAMETHYLDISILOXANE	**60-90%**
CAS No.: 107-46-0	**EC No.: 203-492-7**
GHS Classification Flam. Liq. 2 - H225; Aquatic Acute 1 - H400	

HFC-134a Tetrafluoroethane	**10-30%**
CAS No.: 811-97-2	**EC No.: 212-377-0**
GHS Classification Not classified.	

4. FIRST-AID MEASURES

Description of first aid measures

General Information

Promptly remove any clothing that becomes wet. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

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

Ingestion

DO NOT INDUCE VOMITING! Immediately rinse mouth and drink plenty of water (200-300 ml). Do not give victim anything to drink if he is unconscious. Consult a physician for specific advice.

Skin Contact

Promptly wash contaminated skin with water. Promptly remove clothing if soaked through and wash the skin with water. Contact physician if irritation continues.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. 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 dependant of 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 redness, itching, irritation and eczema/chapping.

Eye Contact

Irritating and may cause redness and pain. Irritation and redness followed by blurred vision.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)	689 C / 365 C
Flammability Limit - Lower(%)	1.25
Flammability Limit - Upper(%)	18.6
Flash point (°C)	-4.0 C / 24.0 F TCC (Tag closed cup).

Extinguishing Media

Use: 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.

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. During fire, toxic gases (CO, CO2) are formed.

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Specific Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up.

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapors.

Protective Equipment For Fire-Fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear approved, tight fitting safety glasses where splashing is probable.

Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

Spill Clean Up Methods

Wear necessary protective equipment. If leakage cannot be stopped, evacuate area. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. 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

Handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Keep out of the reach of children.

Storage

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

Specific end use(s)

Cleaning agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
1-METHOXY-2-PROPANOL	ACGIH	100 ppm		150 ppm		

ACGIH=American Conference of Governmental Industrial Hygienists.

Ingredient Comments

WEL = Workplace Exposure Limits

Protective Equipment


Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Occupational Exposure Limit

Hand Protection

For prolonged or repeated skin contact use suitable protective gloves. Gloves of nitrile rubber, PVA or Viton are recommended.

Eye Protection

Use eye protection. Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

DC1 - N0-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Clear Colourless.
Odor	Slight odor. Ether.
Solubility	Not soluble in water.
Initial boiling point and boiling range	98 C / 210 F
Vapor density (air=1)	> 1.0
Vapor pressure	44.6 mm Hg 25
Flash point	-4.0 C / 24.0 F TCC (Tag closed cup).
Auto Ignition Temperature (°C)	689 C / 365 C
Flammability Limit - Lower(%)	1.25
Flammability Limit - Upper(%)	18.6
Physical Data Comments	Aerosol.
Volatility Description	Volatile
Volatile By Vol. (%)	100
Volatile Organic Compound (VOC)	87 g/litre

10. STABILITY AND REACTIVITY

Reactivity

No specific reactivity hazards associated with this product.

Stability

Stable under normal temperature conditions.

Hazardous Polymerisation

Will not polymerise.

Conditions To Avoid

Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidizing agents. Strong alkalis. Strong mineral acids.

Materials To Avoid

Strong oxidizing substances.

Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Vapors/gases/fumes of: Silicon dioxide Formaldehyde

11. TOXICOLOGICAL INFORMATION

Other Health Effects

This substance has no evidence of carcinogenic properties.

Toxicological Information on Ingredients:

1-METHOXY-2-PROPANOL (CAS: 107-98-2)

HFC-134a Tetrafluoroethane (CAS: 811-97-2)

Toxic Dose 1 - LD 50

>2085 mg/kg (oral rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

HEXAMETHYLDISILOXANE (CAS: 107-46-0)

Toxic Conc. - LC 50

106 mg/l/4h (inh-rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not known.

Acute Fish Toxicity

Very toxic to aquatic organisms.

Degradability

The degradability of the product has not been stated.

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Mobility:

Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Other adverse effects

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

Ecological Information on Ingredients:

HFC-134a Tetrafluoroethane (CAS: 811-97-2)

LC 50, 96 Hrs, Fish mg/l

450

EC 50, 48 Hrs, Daphnia, mg/l

980

HEXAMETHYLDISILOXANE (CAS: 107-46-0)

Acute Fish Toxicity

Very toxic to aquatic organisms.

LC 50, 96 Hrs, Fish mg/l

0.46 mg/l

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

13. DISPOSAL CONSIDERATIONS

Waste Management

Recover and reclaim or recycle, if practical.

Disposal Methods

Empty containers must not be burned because of explosion hazard. Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG)	UN1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
DOT Proper Shipping Name	Limited Quantities
DOT Proper Shipping Name	AEROSOLS
TDG Proper Shipping Name	AEROSOLS
IMDG Class	2.1
ICAO Class	2.1
ICAO Subsidiary Risk	N/A

Transport Labels

DC1 - N0-CLEAN FLUX REMOVER - VERICLEAN, AEROSOL

IMDG Pack Group N/A

Air Pack Group N/A

Environmentally Hazardous Substance/Marine Pollutant

EMS F-E, S-E

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

Not applicable.

15. REGULATORY INFORMATION

Regulatory Status (US)

TSCA: The ingredients of this product are on the TSCA Inventory. This Product is Hazardous under the OSHA Hazard Communication Standard.

Regulatory References

NFPA30 Flammable and Combustible Liquids Code. 29 CFR 1910.1010 Federal Regulations (OSHA Standard).

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

SARA (311/312) Hazard Categories

Acute Chronic Fire

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

California Air Toxics “Hot Spots” (A-I)

The following ingredients are listed.

1-METHOXY-2-PROPANOL

California Air Toxics “Hot Spots” (A-II)

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

1-METHOXY-2-PROPANOL

Rhode Island "Right To Know" List

The following ingredients are listed.

1-METHOXY-2-PROPANOL

Minnesota "Right To Know" List

The following ingredients are listed.

1-METHOXY-2-PROPANOL

HFC-134a Tetrafluoroethane

New Jersey "Right To Know" List

The following ingredients are listed.

1-METHOXY-2-PROPANOL

Pennsylvania "Right To Know" List

The following ingredients are listed.

1-METHOXY-2-PROPANOL

International Inventories

Canada – DSL/NDSL

The following ingredients are listed.

1-METHOXY-2-PROPANOL

HFC-134a Tetrafluoroethane

US - TSCA

The following ingredients are listed.

1-METHOXY-2-PROPANOL

HFC-134a Tetrafluoroethane

US – TSCA 12(b) Export Notification

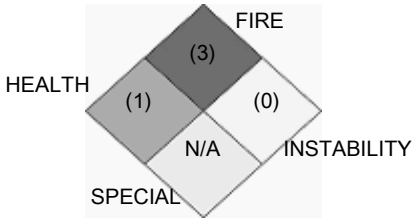
None of the ingredients are listed.

16. OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH	1
FLAMMABILITY	3
PHYSICAL	0
PERSONAL PROTECTION	B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



Revision Comments

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

Revision Date	07/31/2013
Revision	9
Supersedes Date	07/15/2013
Sds No.	Aerosol_DC1
Material Safety Data Sheet Status	Approved.
Date	06 May 2013