



## MATERIAL SAFETY DATA SHEET

### DC1 - VERICLEAN FLUX REMOVER, AEROSOL

#### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>PRODUCT NAME</b>	DC1 - VERICLEAN FLUX REMOVER, AEROSOL		
<b>PRODUCT NO.</b>	MCC-DC1101, MCC-DC1105, MCC-DC1		
<b>PRODUCT USE</b>	Cleaning agent.		
<b>SUPPLIER</b>	<b>MICROCARE EUROPE, BVBA</b> Havendoklaan 19 1804 Cargovil - Vilvoorde Belgium Tel: +32 2 251 95 05	<b>MANUFACTURER</b>	<b>MICROCARE CORPORATION</b> 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
<b>CONTACT PERSON</b>	techsupport@microcare.com		
<b>EMERGENCY TELEPHONE</b>	0032-2-251-95-05 (9 AM - 5 PM, Mon- Fri)		
<b>IDENTIFICATION No.</b>	UN1950		

#### 2 HAZARDS 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.

##### 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.

##### 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.

##### POTENTIAL HEALTH EFFECTS

###### 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.

###### CARCINOGENICITY

This substance has no evidence of carcinogenic properties.

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %
1-METHOXY-2-PROPANOL	203-539-1	107-98-2	1-5%
HEXAMETHYLDISILOXANE	203-492-7	107-46-0	60-90%
HFC-134a Tetrafluoroethane	212-377-0	811-97-2	10-30%

##### COMPOSITION COMMENTS

The Data Shown is in accordance with the latest EC Directives.

## DC1 - VERICLEAN FLUX REMOVER, AEROSOL

### 4 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.

#### 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!

#### 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.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

#### 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.

#### 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.

#### PROTECTIVE MEASURES IN FIRE

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

**AUTO IGNITION TEMPERATURE** 689 C / 365 C  
(°C)

**FLAMMABILITY LIMIT - LOWER(%)** 1.25

**FLAMMABILITY LIMIT - UPPER(%)** 18.6

**FLASH POINT (°C)** 3.0 C / 37.0 F TCC (Tag closed cup).

### 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.

### 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.

## DC1 - VERICLEAN FLUX REMOVER, AEROSOL

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 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.

#### 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.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOR	Clear Colourless.
ODOR	Slight odor. Ether.
PHYSICAL DATA COMMENTS	Aerosol.
VOLATILITY DESCRIPTION	Volatile
SOLUBILITY	Not soluble in water.
BOILING POINT (°C)	98 C / 210 F
VAPOR DENSITY (air=1)	> 1.0
VAPOR PRESSURE	44.6 mm Hg 25
VOLATILE BY VOL. (%)	100
FLASH POINT (°C)	3.0 C / 37.0 F TCC (Tag closed cup).
VOLATILE ORGANIC CONTENT	87 g/litre

### 10 STABILITY AND REACTIVITY

#### STABILITY

Stable under normal temperature conditions.

#### CONDITIONS TO AVOID

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

#### HAZARDOUS POLYMERISATION

Will not polymerise.

#### 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

## DC1 - VERICLEAN FLUX REMOVER, AEROSOL

### 11 TOXICOLOGICAL INFORMATION

<b>Name</b>	1-METHOXY-2-PROPANOL
<b>Name</b>	HFC-134a Tetrafluoroethane
<b>Toxic Dose 1 - LD 50</b>	>2085 mg/kg (oral rat)
<b>Other Health Effects</b>	This substance has no evidence of carcinogenic properties.
<b>Name</b>	HEXAMETHYLDISILOXANE
<b>Toxic Conc. - LC 50</b>	87 mg/l/4h (inh-rat)

### 12 ECOLOGICAL INFORMATION

#### MOBILITY

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

<b>Name</b>	1-METHOXY-2-PROPANOL
	HFC-134a Tetrafluoroethane
<b>LC 50, 96 Hrs, Fish mg/l</b>	450
<b>EC 50, 48 Hrs, Daphnia, mg/l</b>	980
<b>Name</b>	HEXAMETHYLDISILOXANE
<b>LC 50, 96 Hrs, Fish mg/l</b>	0.46 mg/l
<b>Acute Fish Toxicity</b>	Very toxic to aquatic organisms.

### 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



<b>DOT PROPER SHIPPING NAME</b>	AEROSOLS
<b>DOT PROPER SHIPPING NAME</b>	Consumer Commodity ORM-D
<b>TDG SHIPPING NAME</b>	AEROSOLS
<b>IDENTIFICATION No.</b>	UN1950
<b>UN NO. SEA</b>	1950
<b>IMDG CLASS</b>	2.1
<b>IMDG PAGE NO.</b>	94
<b>IMDG PACK GR.</b>	N/A
<b>EMS</b>	F-D, S-U
<b>MFAG</b>	See Subsection 4.2 of MFAG.
<b>UN NO. AIR</b>	1950
<b>AIR CLASS</b>	2.1
<b>AIR SUB CLASS</b>	N/A
<b>AIR PACK GR.</b>	N/A

### 15 REGULATORY INFORMATION

## DC1 - VERICLEAN FLUX REMOVER, AEROSOL

### INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
HFC-134a Tetrafluoroethane	DSL	Yes.						

COMPONENT	TSCA 12(b) Export Notification
HFC-134a Tetrafluoroethane	No.

### SARA (311/312) HAZARD CATEGORIES

Acute Chronic Fire

### 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).

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

### LABEL(S) FOR SUPPLY



Compressed Gas.



Flammable Gas.



Materials Causing Other Toxic Effects.

### CONTROLLED PRODUCT CLASSIFICATION

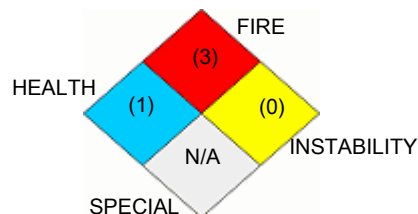
Canadian WHMIS Classification A B5 D2A D2B WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

### 16 OTHER INFORMATION

### HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH	1
FLAMMABILITY	3
PHYSICAL	0
PERSONAL PROTECTION	upervisor

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



### REVISION COMMENTS

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

REVISION DATE 05/10/2009

VERSION No. 2

### SAFETY DATA SHEET STATUS

Approved.

DATE January 6, 2011

## DC1 - VERICLEAN FLUX REMOVER, AEROSOL

### DISCLAIMER

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 o