

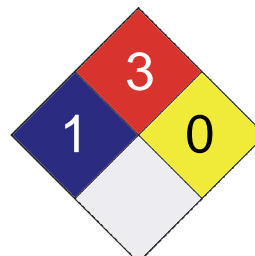
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** VeriClean™ Solvent; MCC-DC1G, MCC-DC1P, MCC-DC1D  
**CAS #** Mixture  
**Product Use** Circuit Board Cleaner  
**Manufacturer** Micro Care Corporation  
595 John Downey Drive  
New Britain, CT 06051 US  
Phone: 1-860-827-0626  
Emergency Phone: 1-860-827-0626

| LEGEND<br>HMIS/NFPA |   |
|---------------------|---|
| Severe              | 4 |
| Serious             | 3 |
| Moderate            | 2 |
| Slight              | 1 |
| Minimal             | 0 |

|                     |     |
|---------------------|-----|
| Health              | / 1 |
| Flammability        | 3   |
| Physical Hazard     | 0   |
| Personal Protection | B   |



## 2. Hazards Identification

**Emergency Overview** DANGER  
Flammable liquid - may release vapours that form flammable mixtures at or above the flash point. Containers may explode when heated.  
EYE AND SKIN IRRITANT.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** May cause irritation.

**Skin** May cause irritation.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** May cause stomach distress, nausea or vomiting.

**Target organs** Eyes. Respiratory system. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

## 3. Composition/Information on Ingredients

| Ingredient(s)                     | CAS #    | Percent  |
|-----------------------------------|----------|----------|
| hexamethyldisiloxane              | 107-46-0 | 60 - 100 |
| Propylene glycol monomethyl ether | 107-98-2 | 7 - 13   |

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

**Skin contact** Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

**Notes to physician** Symptoms may be delayed.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting Measures

|   |   |
|---|---|
| <b>Flammable properties</b>                       | Flammable by WHMIS criteria. Vapours may travel to a source of ignition and flash back. Containers may explode when heated. |
| <b>Extinguishing media</b>                        |   |
| <b>Suitable extinguishing media</b>               | Dry chemical. Carbon dioxide. Alcohol foam. Polymer foam.   |
| <b>Unsuitable extinguishing media</b>             | Water.  |
| <b>Protection of firefighters</b>                 |   |
| <b>Specific hazards arising from the chemical</b> | Not available   |
| <b>Protective equipment for firefighters</b>      | Firefighters should wear full protective clothing including self contained breathing apparatus.                             |
| <b>Hazardous combustion products</b>              | May include and are not limited to: Oxides of carbon. Silicon dioxide.  |
| <b>Explosion data</b>                             |   |
| <b>Sensitivity to mechanical impact</b>           | Not available   |
| <b>Sensitivity to static discharge</b>            | Not available   |

## 6. Accidental Release Measures

|                                |  |
|--------------------------------|--|
| <b>Personal precautions</b>    | Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.  |
| <b>Methods for containment</b> | Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.  |
| <b>Methods for cleaning up</b> | Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. |

## 7. Handling and Storage

|                 |   |
|-----------------|---|
| <b>Handling</b> | Use good industrial hygiene practices in handling this material.  |
| <b>Storage</b>  | Keep out of reach of children. Do not store at temperatures above 49°C. Store in a closed container away from incompatible materials. |

## 8. Exposure Controls / Personal Protection

|                                       |  |
|---------------------------------------|--|
| <b>Exposure limits</b>                |  |
| <b>Ingredient(s)</b>                  | <b>Exposure limits</b>   |
| hexamethyldisiloxane                  | <b>ACGIH-TLV</b><br>Not established  |
| Propylene glycol monomethyl ether     | <b>ACGIH-TLV</b><br>TWA: 100 ppm<br>STEL: 150 ppm  |
| <b>Engineering controls</b>           | General ventilation normally adequate.   |
| <b>Personal protective equipment</b>  |  |
| <b>Eye/Face protection</b>            | Safety glasses   |
| <b>Hand protection</b>                | Rubber gloves. Confirm with a reputable supplier first.  |
| <b>Skin and body protection</b>       | As required by employer code.  |
| <b>Respiratory protection</b>         | Not normally required if good ventilation is maintained and exposure guidelines are not exceeded. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.          |

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## 9. Physical & Chemical Properties

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|   |                             |
|---|-----------------------------|
| Appearance  | Clear.                      |
| Colour  | Colourless                  |
| Form  | Liquid                      |
| Odour   | Slight ethereal             |
| Odour threshold                                   | Not available               |
| Physical state                                    | Liquid                      |
| pH  | Not available               |
| Freezing point                                    | Not available               |
| Boiling point                                     | 98 °C (208.40 °F)           |
| Flash point                                       | -4 °C (24.80 °F) TCC        |
| Evaporation Rate                                  | Not available               |
| Flammability limits in air, lower, %<br>by volume | 1.25                        |
| Flammability Limits in Air, Upper, %<br>by Volume | 18.6                        |
| Vapour pressure                                   | 44.6 mmHg                   |
| Vapour density                                    | Not available               |
| Specific gravity                                  | 0.77 (H <sub>2</sub> O = 1) |
| Octanol/water coefficient                         | Not available               |
| Solubility (H <sub>2</sub> O)                     | Insoluble                   |
| Auto-ignition temperature                         | 365 °C (689.00 °F)          |
| Viscosity   | 0.49 cPs                    |
| Percent volatile                                  | 100 %                       |

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## 10. Chemical Stability & Reactivity Information

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|                                    |  |
|------------------------------------|--|
| Chemical stability                 | Stable under recommended storage conditions.                           |
| Conditions to avoid                | Avoid high temperatures. Do not mix with other chemicals.              |
| Incompatible materials             | Caustics. Acids. Oxidizers.  |
| Hazardous decomposition products   | May include and are not limited to: Oxides of carbon. Silicon dioxide. |
| Possibility of hazardous reactions | Hazardous polymerisation does not occur.                               |

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## 11. Toxicological Information

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### Component analysis - LC50

| Ingredient(s)                     | LC50          |
|-----------------------------------|---------------|
| hexamethyldisiloxane              | 15956 ppm rat |
| Propylene glycol monomethyl ether | 15000 ppm rat |

### Component analysis - Oral LD50

| Ingredient(s)                     | LD50           |
|-----------------------------------|----------------|
| hexamethyldisiloxane              | Not available  |
| Propylene glycol monomethyl ether | 3739 mg/kg rat |

### Effects of acute exposure

|                      |   |
|----------------------|---|
| Eye                  | May cause irritation.                           |
| Skin                 | May cause irritation.                           |
| Inhalation           | May cause respiratory tract irritation.         |
| Ingestion            | May cause stomach distress, nausea or vomiting. |
| Sensitisation        | Non-hazardous by WHMIS criteria.                |
| Chronic effects      | Non-hazardous by WHMIS criteria.                |
| Carcinogenicity      | Non-hazardous by WHMIS criteria.                |
| Mutagenicity         | Non-hazardous by WHMIS criteria.                |
| Reproductive effects | Non-hazardous by WHMIS criteria.                |

## 12. Ecological Information

|  |   |
|--|---|
| <b>Ecotoxicity effects</b>             | Components of this product have been identified as having potential environmental concerns. |
| <b>Environmental effects</b>           | Not available   |
| <b>Aquatic toxicity</b>                | Not available   |
| <b>Persistence and degradability</b>   | Not available   |
| <b>Bioaccumulation/accumulation</b>    | Not available   |
| <b>Partition coefficient</b>           | Not available   |
| <b>Mobility in environmental media</b> | Not available   |
| <b>Chemical fate information</b>       | Not available   |

## 13. Disposal Considerations

|  |  |
|--|--|
| <b>Waste codes</b>                           | Not available  |
| <b>Disposal instructions</b>                 | Review federal, provincial, and local government requirements prior to disposal. |
| <b>Waste from residues / unused products</b> | Not available  |
| <b>Contaminated packaging</b>                | Not available  |

## 14. Transport Information

### Transportation of Dangerous Goods (TDG)

#### Basic shipping requirements:

|                                |   |
|--------------------------------|---|
| <b>Proper shipping name</b>    | FLAMMABLE LIQUID, N.O.S. (hexamethyldisiloxane) |
| <b>Hazard class</b>            | 3   |
| <b>UN number</b>               | 1993  |
| <b>Packing group</b>           | II  |
| <b>Additional information:</b> |   |
| <b>Special provisions</b>      | 16  |



## 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS classification**

Class B - Division 2 - Flammable Liquid, Class D - Division 2B

**WHMIS status**

Controlled

**WHMIS labeling**



### Inventory Status

**Country(s) or region**

Canada

Canada

**Inventory Name**

Domestic Substances List (DSL)

Non-Domestic Substances List (NDSL)

**On Inventory (Yes/No)\***

Yes

No

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## 16. Other Information

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**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date**

28-Jun-2006

**Effective Date**

01-Jul-2006

**Expiry Date**

01-Jul-2009

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