

Revision Date 07/31/2013
Revision 6
Supersedes Date 05/06/2013



SAFETY DATA SHEET CCC - ELECTRICAL CONTACT CLEANER

1. IDENTIFICATION

Product Name CCC - ELECTRICAL CONTACT CLEANER
Product No. MCC-CCC, MCC-CCC101
Synonyms, Trade Names "CCC - Contact Cleaner C"
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

Colourless liquid. Slight odor. Ether This product is not flammable. Avoid inhalation of vapors/spray and contact with skin and eyes. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Appearance Clear liquid. Aerosol.
Color Colourless.
Odor Slight odor. Ether

GHS Pictogram
 No pictogram required.

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

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.
 P261 Avoid breathing vapours.
 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.

GHS Classification

Physical and Chemical Hazards Not classified.
 Human health Not classified.
 Environment Aquatic Chronic 3 - H412

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

WHMIS Label

CCC - ELECTRICAL CONTACT CLEANER

HFC-134a Tetrafluoroethane	10-30%
CAS No.: 811-97-2	EC No.: 212-377-0
GHS Classification Not classified.	
PENTAFLUOROBUTANE	30-60%
CAS No.: 406-58-6	EC No.:
GHS Classification Flam. Liq. 2 - H225	

4. FIRST-AID MEASURES**Description of first aid measures****General Information**

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Place unconscious person on the side in the recovery position and ensure breathing can take place. Perform artificial respiration if breathing has stopped. Keep out of the reach of children.

Inhalation

Remove victim immediately from source of exposure. Move into fresh air and keep at rest. If respiratory problems, artificial respiration/oxygen. Get medical attention.

Ingestion

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention.

Skin Contact

Remove contaminated clothes and rinse skin thoroughly with water.

Eye Contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Consult a physician for specific advice.

Most important symptoms and effects, both acute and delayed**Inhalation**

Vapors may cause drowsiness and dizziness. Headache.

Ingestion

May cause stomach pain or vomiting.

Skin Contact

Prolonged contact may cause redness, irritation and dry skin.

Eye Contact

Irritating and may cause redness and pain.

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**Flammability Class**

This product is not flammable.

Flammability Limit - Lower(%) 5.5

Flammability Limit - Upper(%) 9.0

CCC - ELECTRICAL CONTACT CLEANER

Extinguishing Media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Unusual Fire & Explosion Hazards

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

Specific Hazards

Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

Special Fire Fighting Procedures

Move container from fire area if it can be done without risk.

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

Warn everybody of potential hazards and evacuate if necessary. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small.

Environmental Precautions

Contain spillages with sand, earth or any suitable adsorbent material. Avoid release to the environment.

Spill Clean Up Methods

Provide ventilation and confine spill. Do not allow runoff to sewer. Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Collect with absorbent, non-combustible material into suitable containers.

Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling

Provide good ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed. Keep out of the reach of children.

Storage

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

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
ACETONE	PEL	1000 ppm	2400 mg/m ³			
ACETONE	ACGIH	500 ppm		750 ppm		A4
COMPONENT						IDLH
ACETONE						2500 ppm

ACGIH=American Conference of Governmental Industrial Hygienists.

A4: Not Classifiable as a Human Carcinogen.

Protective Equipment



Engineering Measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory Equipment

Considering the size of the packaging, the risk is regarded as minimal. Vapors are heavier than air and may travel along the floor and in the bottom of containers. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

Self-contained breathing apparatus with full facepiece.

CCC - ELECTRICAL CONTACT CLEANER

Hand Protection

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

Eye Protection

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

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene Measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. When using do not eat, drink or smoke.

Skin Protection

Wear apron or protective clothing in case of splashes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear liquid. Aerosol.
Color	Colourless.
Odor	Slight odor. Ether
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	44 C / 111 F
Vapor density (air=1)	4
Vapor pressure	47 kPa 20
Flammability Limit - Lower(%)	5.5
Flammability Limit - Upper(%)	9.0
Other Flammability	
This product is not flammable.	
Volatility Description	Volatile
Volatile By Vol. (%)	100
Flammability	This product is not flammable.

10. STABILITY AND REACTIVITY

Reactivity

No specific reactivity hazards associated with this product.

Stability

Stable under normal temperature conditions and recommended use.

Hazardous Polymerisation

Will not polymerise.

Conditions To Avoid

Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

Materials To Avoid

Alkali metals. Alkali earth metals. Powdered metal.

Hazardous Decomposition Products

When heated, toxic and corrosive vapors/gases may be formed. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO₂). Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

Other Health Effects

This substance has no evidence of carcinogenic properties.

Toxicological Information on Ingredients:

ACETONE (CAS: 67-64-1)

A MIXTURE OF: (R,R)-1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE, (S,S)-1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE (CAS: -)

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.

CCC - ELECTRICAL CONTACT CLEANER

PENTAFLUOROBUTANE (CAS: 406-58-6)

Toxic Dose 1 - LD 50

>2000 mg/kg (oral rat)

Toxic Conc. - LC 50

25000 ppm/4h (inh-rat)

Other Health Effects

IARC Not Listed. OSHA Not Regulated.

12. ECOLOGICAL INFORMATION

Ecotoxicity

There are no data on the ecotoxicity of this product.

Degradability

The product contains persistent (heavily degradable) substances.

Bioaccumulative potential

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

Mobility:

The product contains volatile substances, which may spread in the atmosphere.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

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

PENTAFLUOROBUTANE (CAS: 406-58-6)

LC 50, 96 Hrs, Fish mg/l

>200

EC 50, 48 Hrs, Daphnia, mg/l

>200

Degradability

There are no data on the degradability of this product.

Bioaccumulative potential

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

Mobility:

The product has poor water-solubility.

IC 50, 72 Hrs, Algae, mg/l

113

13. DISPOSAL CONSIDERATIONS

Waste Management

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

Disposal Methods

Dispose of waste and residues in accordance with local authority requirements. Empty containers must not be burned because of explosion hazard. Aerosol containers can explode when heated, due to excessive pressure build-up. Recover and reclaim or recycle, if practical.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG) UN1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

CCC - ELECTRICAL CONTACT CLEANER

DOT Proper Shipping Name Limited Quantity
DOT Proper Shipping Name AEROSOLS
TDG Proper Shipping Name AEROSOLS
DOT Hazard Class
2.2
IMDG Class 2.2
ICAO Class 2.2
ICAO Subsidiary Risk N/A
Transport Labels



DOT Pack Group N/A
IMDG Pack Group N/A
Air Pack Group N/A

Environmentally Hazardous Substance/Marine Pollutant
No.

Markings

Consumer Commodity ORM-D

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

Not relevant No information required.

15. REGULATORY INFORMATION

Regulatory Status (US)

SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372. TSCA: The ingredients of this product are on the TSCA Inventory.

Regulatory References

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

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

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

The following ingredients are listed.

ACETONE; 5, 000 lbs (2270 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

SARA (311/312) Hazard Categories

Acute

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

CCC - ELECTRICAL CONTACT CLEANER

State Regulations Comments

N/A.

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

ACETONE

Rhode Island "Right To Know" List

The following ingredients are listed.

ACETONE

Minnesota "Right To Know" List

The following ingredients are listed.

ACETONE

HFC-134a Tetrafluoroethane

New Jersey "Right To Know" List

The following ingredients are listed.

ACETONE

Pennsylvania "Right To Know" List

The following ingredients are listed.

ACETONE

International Inventories

Canada – DSL/NDSL

The following ingredients are listed.

ACETONE

HFC-134a Tetrafluoroethane

PENTAFLUOROBUTANE

US - TSCA

The following ingredients are listed.

ACETONE

HFC-134a Tetrafluoroethane

PENTAFLUOROBUTANE

US – TSCA 12(b) Export Notification

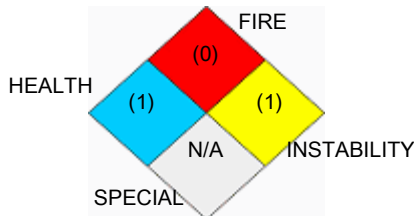
None of the ingredients are listed.

16. OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH		1
FLAMMABILITY		0
PHYSICAL		1
PERSONAL PROTECTION		A

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



CCC - ELECTRICAL CONTACT CLEANER

Revision Comments

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

Revision Date	07/31/2013
Revision	6
Supersedes Date	05/06/2013
Sds No.	AEROSOL_CCC
Material Safety Data Sheet Status	Approved.
Date	06 May 2013

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 own particular use.