



## SAFETY DATA SHEET

### MicroCare MCA Specialty Fluid

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

<b>Product name</b>	MicroCare MCA Specialty Fluid
<b>Product number</b>	MCC-MCARP, MCC-MCARGG, MCC-MCARD, MCC-MCARL, MCC-MCARGL, MCC-MCARG
<b>Synonyms; trade names</b>	MicroCare Repackaged MCA specialty fluid
<b><u>Recommended use of the chemical and restrictions on use</u></b>	
<b>Application</b>	Cleaning agent.

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

<b>OSHA Regulatory Status</b>	This Product is Not Hazardous under the OSHA Hazard Communication Standard.
<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Eye Irrit. 2A - H319 STOT SE 3 - H336
<b>Human health</b>	Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Mild dermatitis, allergic skin rash.
<b>Environmental</b>	The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
<b>Physicochemical</b>	Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. Gas or vapor displaces oxygen available for breathing (asphyxiant).

##### Label elements

## MicroCare MCA Specialty Fluid

### Hazard symbols



<b>Signal word</b>	Warning
<b>Hazard statements</b>	H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
<b>Precautionary statements</b>	P261 Avoid breathing vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P312 Call a poison center/ doctor if you feel unwell. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/ container in accordance with national regulations.
<b>Supplemental label information</b>	Safety data sheet available on request. For use in industrial installations only.
<b>Contains</b>	trans-1,2-DICHLOROETHYLENE

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

<b>1,1,1,2,2,3,4,5,5,5-decafluoropentane</b>	<b>60-100%</b>
CAS number: 138495-42-8	
<b>Classification</b> Not relevant.	
<b>trans-1,2-DICHLOROETHYLENE</b>	<b>30-60%</b>
CAS number: 156-60-5	
<b>Classification</b> Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336 Not relevant.	

The full text for all hazard statements is displayed in Section 16.

<b>Composition comments</b>	TSCA: The ingredients of this product are listed on the active TSCA Inventory. The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200.
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### Composition

### 4. First-aid measures

#### Description of first aid measures

## MicroCare MCA Specialty Fluid

<b>General information</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Place unconscious person on the side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Consult a physician for specific advice.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately.
<b>Skin Contact</b>	Wash skin thoroughly with soap and water. Remove contaminated clothing and rinse skin thoroughly with water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

### Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapor concentrations. May cause discomfort. Symptoms following overexposure may include the following: Headache. Dizziness. Nausea, vomiting.
<b>Inhalation</b>	May cause an asthma-like shortness of breath. Vapors may cause headache, fatigue, dizziness and nausea. Arrhythmia (deviation from normal heart beat).
<b>Ingestion</b>	Pulmonary edema, frothy sputum.
<b>Skin contact</b>	Skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
<b>Eye contact</b>	May cause temporary eye irritation. Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Water spray. Never use water by itself on spillage; this will spread the spill and cause further contamination.

### Special hazards arising from the substance or mixture

<b>Flammability Class</b>	The product is not flammable. Tag closed cup.
<b>Specific hazards</b>	Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors. Closed containers can burst violently when heated, due to excess pressure build-up.
<b>Hazardous combustion products</b>	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Fire creates: Carbonyl compounds. Chlorides.

### Advice for firefighters

## MicroCare MCA Specialty Fluid

<b>Protective actions during firefighting</b>	Containers close to fire should be removed or cooled with water.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. For personal protection, see Section 8.
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#### Environmental precautions

<b>Environmental precautions</b>	Contain spillage with sand, earth or other suitable non-combustible material. Avoid release to the environment.
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#### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Contain and absorb spillage with sand, earth or other non-combustible material. Collect spillage with a shovel and broom, or similar and reuse, if possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. It is recommended that gloves are made of the following material: Neoprene.
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<b>Reference to other sections</b>	For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.
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### 7. Handling and storage

#### Precautions for safe handling

<b>Usage precautions</b>	Provide adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Keep out of the reach of children.
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#### Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store in tightly-closed, original container in a dry, cool and well-ventilated place.
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<b>Storage class</b>	Unspecified storage. The product is not flammable.
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#### Specific end uses(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.
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<b>Reference to other sections.</b>	Store away from incompatible materials (see Section 10).
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### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

##### 1,1,1,2,2,3,4,5,5,5-decafluoropentane

No information available that would effect occupational exposure limit values.

##### trans-1,2-DICHLOROETHYLENE

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 793 mg/m<sup>3</sup>

ACGIH = American Conference of Governmental Industrial Hygienists.

#### Exposure controls

## MicroCare MCA Specialty Fluid

### Protective equipment



### Appropriate engineering controls

No specific ventilation requirements. This product must not be handled in a confined space without adequate ventilation.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber).

### Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.

### Hygiene measures

Avoid inhalation of spray mist and contact with skin and eyes. When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet.

### Respiratory protection

Vapors are heavier than air and may travel along the floor and accumulate in the bottom of containers. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear self-contained breathing apparatus with full facepiece.

### Thermal hazards

Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Clear liquid.
Color	Colorless.
Odor	Slight. Ether.
Odor threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	39°C/102°F @ 101.3 kPa
Flash point	The product is not flammable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: None Upper flammable/explosive limit: None
Other flammability	The product is not flammable. Aerosol ignition distance: none at 0.0 cm
Vapor pressure	61.9 kPa @ 25°C

## MicroCare MCA Specialty Fluid

<b>Vapor density</b>	5.4 Heavier than air
<b>Relative density</b>	No information available.
<b>Bulk density</b>	1.41 g/cm <sup>3</sup> at 25 C / 77 F
<b>Solubility(ies)</b>	15 g/l water @ 25°C/77°F
<b>Partition coefficient</b>	No information available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	0.49 mPa s @ 25°C/77°F
<b>Explosive properties</b>	No information available.
<b>Global Warming Potential (GWP)</b>	
<b>Refractive index</b>	No information available.
<b>Particle size</b>	No information available.
<b>Molecular weight</b>	No information available.
<b>Volatility</b>	100%
<b>Saturation concentration</b>	No information available.
<b>Critical temperature</b>	No information available.
<b>Volatile organic compound</b>	No information available.

### 10. Stability and reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	Will not polymerize.
<b>Conditions to avoid</b>	Keep away from heat, sparks and open flame. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapors.
<b>Materials to avoid</b>	Alkali metals. Alkaline earth metals. Powdered metal.
<b>Hazardous decomposition products</b>	Heating may generate the following products: Toxic and corrosive gases or vapors. Halogenated hydrocarbons. Hydrogen fluoride (HF). Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).

### 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rabbit

#### Acute toxicity - inhalation

## MicroCare MCA Specialty Fluid

ATE inhalation (vapours mg/l) 28.95

<b>Inhalation</b>	Vapors may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing.
<b>Ingestion</b>	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
<b>Skin Contact</b>	Product has a defatting effect on skin. May cause allergic contact eczema.
<b>Eye contact</b>	May cause temporary eye irritation.
<b>Medical Symptoms</b>	Gas or vapor in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

### Toxicological information on ingredients.

#### 1,1,1,2,2,3,4,5,5,5-decafluoropentane

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 5,000.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 114.0

Species Rat

ATE inhalation (vapours mg/l) 114.0

##### Skin corrosion/irritation

Animal data Not irritating. Rabbit

Human skin model test Data lacking.

Extreme pH Not applicable. Not corrosive to skin.

##### Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

##### Respiratory sensitization

Respiratory sensitization Data lacking.

##### Skin sensitization

Skin sensitization Not sensitizing. - Guinea pig: Not sensitizing.

## MicroCare MCA Specialty Fluid

### Germ cell mutagenicity

**Genotoxicity - in vitro** This substance has no evidence of mutagenic properties.

**Genotoxicity - in vivo** This substance has no evidence of mutagenic properties.

### Carcinogenicity

**Carcinogenicity** Does not contain any substances known to be carcinogenic.

**IARC carcinogenicity** Not listed.

**NTP carcinogenicity** Not listed.

**OSHA Carcinogenicity** Not listed.

### Reproductive toxicity

**Reproductive toxicity - fertility** No evidence of reproductive toxicity in animal studies.

**Skin Contact** Skin irritation should not occur when used as recommended. May cause defatting of the skin but is not an irritant.

**Eye contact** May cause eye irritation.

**Acute and chronic health hazards** There is no evidence that the product can cause cancer.

### trans-1,2-DICHLOROETHYLENE

**Other health effects** There is no evidence that the product can cause cancer.

### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 7,902.0

**Species** Rat

**ATE oral (mg/kg)** 7,902.0

### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rat

**ATE dermal (mg/kg)** 5,000.0

### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 11.0

### Skin corrosion/irritation

**Skin corrosion/irritation** Prolonged and frequent contact may cause redness and irritation.

**Animal data** Slightly irritating. Rabbit

### Serious eye damage/irritation

**Serious eye damage/irritation** Supplier's information. Rabbit 500 mg 24 hours Causes mild skin irritation.



## MicroCare MCA Specialty Fluid

### Respiratory sensitization

**Respiratory sensitization** No specific test data are available.

### Skin sensitization

**Skin sensitization** No specific test data are available.

### Germ cell mutagenicity

**Genotoxicity - in vitro** This substance has no evidence of mutagenic properties.

**Genotoxicity - in vivo** This substance has no evidence of mutagenic properties.

### Carcinogenicity

**Carcinogenicity** No specific test data are available.

### Specific target organ toxicity - single exposure

**STOT - single exposure** NOAEL Not available.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL 16 mg/l, 90 days

**Target organs** Endocrine system Liver Kidneys Bladder Respiratory tract

## 12. Ecological information

**Ecotoxicity** The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

### Ecological information on ingredients.

#### 1,1,1,2,2,3,4,5,5,5-decafluoropentane

**Ecotoxicity** It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnies.

#### trans-1,2-DICHLOROETHYLENE

**Ecotoxicity** Harmful to aquatic life. May cause long lasting harmful effects to aquatic life.

### Ecological information on ingredients.

#### 1,1,1,2,2,3,4,5,5,5-decafluoropentane

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 13.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** LC<sub>50</sub>, 48 hours: 11.7 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: >120 mg/l, Algae

#### trans-1,2-DICHLOROETHYLENE

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 135 mg/l, Fish

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 220 mg/l, Daphnia magna

## MicroCare MCA Specialty Fluid

**Acute toxicity - aquatic plants** LC<sub>50</sub>, 72 hours: 36.36 mg/l, Pseudokirchneriella subcapitata

### Chronic aquatic toxicity

**Chronic toxicity - fish early life stage** NOEC, 48 hours: 110,000 mg/l, Daphnia magna

### Persistence and degradability

**Persistence and degradability** No data available.

### Ecological information on ingredients.

#### trans-1,2-DICHLOROETHYLENE

**Biodegradation** Not readily biodegradable.  
Method: OECD Test Guideline 301D

### Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** No information available.

### Ecological information on ingredients.

#### 1,1,1,2,2,3,4,5,5,5-decafluoropentane

**Bio-Accumulative Potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

**Partition coefficient** Pow: 2.7

#### trans-1,2-DICHLOROETHYLENE

**Bio-Accumulative Potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

**Partition coefficient** log Pow: 2.06

### Mobility in soil

**Mobility** No data available.

### Ecological information on ingredients.

#### trans-1,2-DICHLOROETHYLENE

**Mobility** The product has poor water-solubility.

### Other adverse effects

**Other adverse effects** The product contains a substance or substances that will contribute to global warming (greenhouse effect).

## 13. Disposal considerations

### Waste treatment methods

**General information** Refer to manufacturer/supplier for information on recovery/recycling. Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## MicroCare MCA Specialty Fluid

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible.

### 14. Transport information

**General** Not regulated. The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**UN proper shipping name**

**Proper shipping name (International)** Not applicable., No information required.

**Transport hazard class(es)**

**Transport labels**

No transport warning sign required.

**Packing group**

**Packing group (International)** Not applicable., No information required.

**Environmental hazards**

**Environmentally Hazardous Substance**

No.

**Special precautions for user**

Not applicable. No information required.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US Federal Regulations**

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**  
Not listed.

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

*trans-1,2-DICHLOROETHYLENE*

Final CERCLA RQ: 1000(454) pounds (Kilograms)

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

Not listed.

**SARA 313 Emission Reporting**

Not listed.

**CAA Accidental Release Prevention**

Not listed.

**SARA (311/312) Hazard Categories**

Acute

**OSHA Highly Hazardous Chemicals**

Not listed.

**US State Regulations**

## MicroCare MCA Specialty Fluid

### California Proposition 65 Carcinogens and Reproductive Toxins

Not listed.

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

Not listed.

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

Not listed.

### California Directors List of Hazardous Substances

*trans*-1,2-DICHLOROETHYLENE

Present.

### Massachusetts "Right To Know" List

*trans*-1,2-DICHLOROETHYLENE

Present.

### Rhode Island "Right To Know" List

Not listed.

### Minnesota "Right To Know" List

Not listed.

### New Jersey "Right To Know" List

Not listed.

### Pennsylvania "Right To Know" List

*trans*-1,2-DICHLOROETHYLENE

Present.

### Inventories

#### Canada - DSL/NDSL

Yes

#### US - TSCA

All the ingredients are listed.

1,1,1,2,2,3,4,5,5,5-DECAFLUOROPENTANE (CAS# 138495-42-8) is controlled by TSCA Section 5, Significant New Use Rule (SNUR; 40 CFR 721.5645) The approved uses are: precision and general cleaning, carrier fluid, displacement drying, printed circuit board cleaning, particulate removal and film cleaning, process medium, heat transfer fluid (dielectric and non-dielectric), and test fluid. Processors and users of this substance must also comply with the applicable general SNUR requirements set forth in 40 CFR 721 subpart A, including export notification requirements if applicable (40 CFR 721.20), and the applicable record keeping requirements set forth at 40 CFR 721.125.

### 16. Other information

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	3/3/2020
<b>Revision</b>	31
<b>Supersedes date</b>	1/7/2020

## MicroCare MCA Specialty Fluid

<b>SDS No.</b>	BULK - MCAR
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness.

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.