

## Material Safety Data Sheet MultiClean

According to 91/155 EC  
Printing Date 5/4/00  
Reviewed On 5/4/00

### 1 Identification of substance:

#### Product details:

#### Trade name: **MultiClean**

Aerosol: MCC-MLC

#### Supplier/Manufacturer:

Micro Care Corporation  
34 Ronzo Road  
Bristol, CT 06010  
United States of America  
Tel.: +1-860-585-7912 Fax: +1-860-585-7378

**Information department:** Product safety department.

#### Emergency information:

National Poisons Information Center Tel.: +44-171-9555095370

### 2 Composition/Data on components:

#### Chemical characterization

**Description:** Active substance with propellant.

#### Dangerous components:

67-63-0 propan-2-ol 25-50 %  
F; R 11

75-37-6 1,1-difluoroethane 6 %  
F+; R 12

### 3 Hazards identification

Hazard description: F Highly flammable

#### Information pertaining to particular dangers for man and environment

R 11 Highly flammable.

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Must not get into children's hands

#### Classification system

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data).

### 4 First aid measures

#### General information

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

#### After inhalation

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

#### After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

#### After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

#### After swallowing

Induce vomiting, if person is conscious. Seek medical help.

Drink plenty of water, but never give anything to drink to an unconscious person.

#### Information for doctor

#### The following symptoms may occur:

Headache  
Gastric or intestinal disorders.  
Vomiting

### 5 Fire fighting measures

#### Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### For safety reasons unsuitable

extinguishing agents Water with full jet.

#### Special hazards caused by the material, its products of combustion or resulting gases:

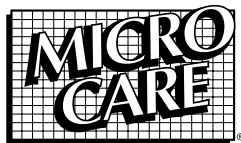
Dangerous decomposition product see chapter 12: stability and reactivity  
Formation of toxic gases is possible during heating or in case of fire.

#### Protective equipment:

Wear self-contained respiratory protective device.

#### Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.



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Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Cool endangered receptacles with water spray.

### **6 Accidental release measures**

#### **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Do not smoke - keep ignition sources away

#### **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

#### **Measures for cleaning/collecting:**

Ensure adequate ventilation.

Absorb liquid components with liquid-binding material.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

### **7 Handling and storage**

#### **Handling**

##### **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Keep away from heat and direct sunlight.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

##### **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Emergency cooling must be available in case of nearby fire.

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

Do not spray on a naked flame or any incandescent material.

#### **Storage**

##### **Requirements to be met by storerooms and receptacles:**

Store cool and dry in a well ventilated area.

Store away from open flames, sources of heat or sparks.

Observe official regulations on storing packagings with pressurized containers.

##### **Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

##### **Further information about storage conditions:**

Keep receptacle tightly sealed.

**Storage class** 2B pressurized gas containers

### **8 Exposure controls and personal protection**

#### **Additional information about design of technical systems:**

Install appropriate mechanical ventilation.

Keep away from open flames and other ignition sources.

Protect against electrostatic charges.

#### **Components with limit values that require monitoring at the workplace:**

67-63-0 propan-2-ol

OEL: Short-term value: 1225 mg/m<sup>3</sup>, 500 ml/m<sup>3</sup>

Long-term value: 980 mg/m<sup>3</sup>, 400 ml/m<sup>3</sup>

#### **Additional information:**

The lists that were valid during the creation were used as basis.

#### **Personal protective equipment General protective and hygienic measures**

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

Do not inhale gases / fumes / aerosols.

Apply solvent resistant skin cream before beginning work.

#### **Breathing equipment:**

Short term filter device:

Filter AX.

**Protection of hands:** Neoprene gloves

**Eye protection:** Tightly sealed goggles.

**Body protection:** Protective work clothing.

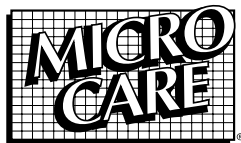
### **9 Physical and chemical properties:**

**Form:** Aerosol

**Colour:**

Colourless

Clear



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**Odour:** Alcohol-like

**Value/Range/Unit Method**

**Change in condition**

**Melting point/Melting range:**

undetermined

**Boiling point/Boiling range:** 82 ° C

**Flash point:** 14 ° C

**Self igniting:** Product is not selfigniting.

**Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Density:** Not determined

**Solubility in / Miscibility with water:** Fully miscible

### **10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Keep away from heat and direct sunlight.

**Materials to be avoided:**

Strong oxidants.

Strong acids

Aldehydes

Acetyl chloride

Halogens

Halogen compounds

**Dangerous reactions**

Danger of receptacles bursting because of high vapour pressure if heated

**Dangerous products of decomposition:**

In the case of fire or at high temperatures the formation of the following decomposition products is possible.

Carbon monoxide and carbon dioxide

Hydrogen fluoride

Fluorocarbons

### **11 Toxicological information**

**Acute toxicity:**

LD/LC50 values that are relevant for classification:

67-63-0 propan-2-ol

Oral: LD50: 4570 mg/kg (rat)

Dermal: LD50: 13400 mg/kg (rabbit)

Inhalative: LC50/4 h: 30 mg/L (rat)

**Primary irritant effect:  
on the skin:**

Irritation to skin and mucous membrane possible.

Continuing or repeated contact with the skin may cause skin disease.

**on the eye:** Light irritation possible

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

In addition to local irritant manifestations, there is a narcotic effect when inhaling high concentrations, with the danger of central respiratory arrest.

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

### **12 Ecological information:**

**Ecotoxicological effects:**

Acquatic toxicity:

67-63-0 propan-2-ol

LC50/96h: 10400 mg/L (Pimephales promelas)

**General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### **13 Disposal considerations**

**Product:**

**Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**

**Recommendation:**

Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### **14 Transport information**

**Land transport ADR/RID(cross-border)**

**ADR/RID class:**2

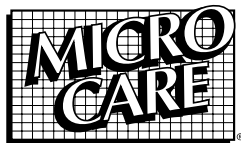
**Item:**5 F

**Danger code (Kemler):-**

**UN-Number:** 1950

**Label:**3

**Description of goods:** Aerosols



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### Maritime transport IMDG:

**IMDG Class:**2

**Page:**2102

**UN Number:** 1950

**Packaging group:** -

**EMS Number:**2-13

**MFAG:**620

**Marine pollutant:**-

**Proper shipping name:** Aerosols

### Air transport ICAO-TI and IATA-DGR:

**ICAO/IATA Class:** 2.1

**UN/ID Number:** 1950

**Packaging group:** -

**Proper shipping name:** Aerosols,  
flammable, n.o.s

### 15 Regulations

#### Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

#### Code letter and hazard designation of product:

F Highly flammable

**Risk phrases:** 11 Highly flammable.

#### Safety phrases:

3/7 Keep container tightly closed in a cool place

16 Keep away from sources of ignition - No smoking.

23 Do not breathe fumes / aerosol

33 Take precautionary measures against static discharges.

51 Use only in well-ventilated areas.

#### Special labelling of certain preparations:

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Must not get into children's hands

### National regulations

#### Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Department issuing MSDS:

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D-25469 Halstenbek, Germany

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