



## SAFETY DATA SHEET

### EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol

#### 1. IDENTIFICATION

<b>Product Name</b>	EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol
<b>Product No.</b>	MCC-EC7M, MCC-EC7101, MCC-EC7M0Y
<b>Synonyms, Trade Names</b>	"EC7M - Bioact EC7M"
<b>Identification No.</b>	UN1950
<b>Identified uses</b>	Cleaning agent.
<b>Supplier</b>	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
<b>Contact Person</b>	techsupport@microcare.com
<b>Web Address</b>	www.MicroCare.com
<b>Emergency Telephone</b>	CHEMTREC (800) 424-9300

#### 2. HAZARD(S) IDENTIFICATION

#### EMERGENCY OVERVIEW

FLAMMABLE. Aerosol. This product has low toxicity. Only large volumes may have adverse impact on human health. Liquid irritates mucous membranes and may cause abdominal pain if swallowed. Liquid may irritate the skin. May irritate eyes. Keep out of the reach of children.

<b>Appearance</b>	Liquid
<b>Color</b>	Colourless to pale yellow.
<b>Odor</b>	Characteristic. Orange.
<b>GHS Pictogram</b>	



**Signal Word** Danger

#### Hazard Statements

H222	Extremely flammable aerosol.
H223	Flammable aerosol.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

#### Precautionary Statements

P102	Keep out of reach of children.
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.

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P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P501 Dispose of contents/container in accordance with local regulations.  
 d-LIMONENE

**Contains**

**GHS Classification**

Physical and Chemical Hazards Flam. Aerosol 1 - H222, H223; Flam. Aerosol 2 - H222, H223  
 Human health Skin Irrit. 2 - H315; Skin Sens. 1 - H317  
 Environment Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

### WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

**WHMIS Label**



Materials Causing Other Toxic Effects.



Compressed Gas.



Flammable Gas.

**Controlled Product Classification**

Canadian WHMIS Classification D2B A B5 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.

**OSHA Regulatory Status**

This Product is Hazardous under the OSHA Hazard Communication Standard.

**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.

**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.

**Skin Contact**

Product has a defatting effect on skin. May cause skin irritation/eczema.

**Eye Contact**

Irritating to eyes.

**Other Health Effects**

This substance has no evidence of carcinogenic properties.

**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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>d-LIMONENE</b>		<b>60-90%</b>
<b>CAS No.: 5989-27-5</b>	<b>EC No.: 227-813-5</b>	
GHS Classification Flam. Liq. 3 - H226; Skin Irrit. 2 - H315; Skin Sens. 1 - H317; Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410		
<b>HFC-134a Tetrafluoroethane</b>		<b>10-30%</b>
<b>CAS No.: 811-97-2</b>	<b>EC No.: 212-377-0</b>	
GHS Classification Not classified.		

### 4. FIRST-AID MEASURES

## EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol

### Description of first aid measures

#### General Information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

#### 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.

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

#### General Information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Vapors may cause headache, fatigue, dizziness and nausea.

#### Ingestion

May cause stomach pain or vomiting. Headache.

#### Skin Contact

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

#### Eye Contact

Irritating and may cause redness and pain. Irritation and redness followed by blurred vision.

### 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 Limit - Lower(%)	.7
Flammability Limit - Upper(%)	6.0
Flash point (°C)	47 C / 117 F TCC (Tag closed cup).

#### Extinguishing Media

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

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

#### 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

Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. Containers can burst violently when heated, due to excess pressure build-up.

#### 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.

#### Protective Equipment For Fire-Fighters

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

## 6. ACCIDENTAL RELEASE MEASURES

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### Personal Precautions

Use protective gloves, goggles and suitable protective clothing. Do not smoke, use open fire or other sources of ignition. Provide adequate ventilation.

### Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

### Spill Clean Up Methods

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Dam and absorb spillages with sand, earth or other non-combustible material. Collect in containers and seal securely.

### Reference to other sections

For personal protection, see section 8.

## 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.

### Specific end use(s)

Cleaning agent.

## 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 hands 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

<b>Appearance</b>	Liquid
<b>Color</b>	Colourless to pale yellow.
<b>Odor</b>	Characteristic. Orange.
<b>Solubility</b>	Insoluble in water
<b>Initial boiling point and boiling range</b>	169 - 187 C / 340 - 372 F
<b>Vapor density (air=1)</b>	4.6
<b>Vapor pressure</b>	1.6 mm Hg 20 C / 70 F
<b>Flash point</b>	47 C / 117 F TCC (Tag closed cup).
<b>Flammability Limit - Lower(%)</b>	.7
<b>Flammability Limit - Upper(%)</b>	6.0

## EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol

Physical Data Comments	Aerosol.
Volatility Description	Volatile
Volatile By Vol. (%)	100

### 10. STABILITY AND REACTIVITY

#### Reactivity

No specific reactivity hazards associated with this product.

#### Stability

Stable under normal temperature conditions.

#### Hazardous Polymerisation

Will not polymerise.

#### Conditions To Avoid

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

#### Materials To Avoid

Strong oxidizing substances.

#### Hazardous Decomposition Products

Fire creates: Vapors/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen fluoride (HF).

### 11. TOXICOLOGICAL INFORMATION

#### Other Health Effects

This substance has no evidence of carcinogenic properties.

#### Toxicological Information on Ingredients:

**d-LIMONENE (CAS: 5989-27-5)**

**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.

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

The product contains a substance which is harmful to aquatic organisms.

#### Acute Fish Toxicity

Very toxic to aquatic organisms.

#### Degradability

The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

#### Bioaccumulative potential

No data available on bioaccumulation.

#### Mobility:

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

#### Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

#### Other adverse effects

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

#### 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

### 13. DISPOSAL CONSIDERATIONS

## EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol

### Waste Management

Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

### 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

UN No. (DOT/TDG)	UN1950
UN No. (ICAO)	UN1950
DOT Proper Shipping Name	Limited Quantities
DOT Proper Shipping Name	Aerosols, Flammable
TDG Proper Shipping Name	Aerosols, Flammable
DOT Hazard Label	
Flammable Gas	
ICAO Class	2.1
ICAO Subsidiary Risk	N/A

### Transport Labels



Air Pack Group N/A

Environmentally Hazardous Substance/Marine Pollutant



Packaging Instructions 203 (air transport)

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

## 15. REGULATORY INFORMATION

### 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).

### US Federal Regulations

#### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

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

Acute Chronic Fire

#### OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

### US State Regulations

## EC7M - SLOW DRYING FLUX REMOVER, CITRUS BASED - Aerosol

### 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

None of the ingredients are listed.

### Rhode Island "Right To Know" List

None of the ingredients are listed.

### Minnesota "Right To Know" List

The following ingredients are listed.

HFC-134a Tetrafluoroethane

### New Jersey "Right To Know" List

None of the ingredients are listed.

### Pennsylvania "Right To Know" List

None of the ingredients are listed.

### International Inventories

#### Canada – DSL/NDSL

All ingredients are listed or exempt.

#### US - TSCA

All ingredients are listed or exempt.

#### US – TSCA 12(b) Export Notification

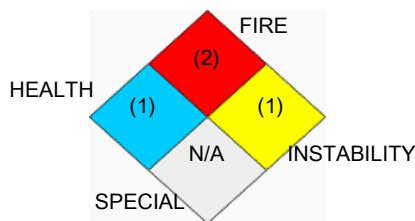
None of the ingredients are listed.

## 16. OTHER INFORMATION

### HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH		1
FLAMMABILITY		2
PHYSICAL		1
PERSONAL PROTECTION		B

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



### Revision Comments

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

<b>Revision Date</b>	01/28/2014
<b>Revision</b>	9
<b>Supersedes Date</b>	07/31/2013
<b>Sds No.</b>	Aerosol_EC7M
<b>Date</b>	28 January 2014

### Disclaimer

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