MATERIAL SAFETY DATA SHEET

EC7M Bioact EC7M, Aerosol

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME EC7M Bioact EC7M, Aerosol

PRODUCT NO. MCC-EC7M, MCC-EC7101

PRODUCT USE Cleaning agent

SUPPLIER
MICROCARE CORPORATION
595 John Downey Drive
New Britain, CT 06019
United States of America
CAGE: OATV9
+1 860-827-0626
+1 860-827-8105
techsupport@microcare.com

EMERGENCY TELEPHONE CHEMTREC (800) 424-9300

IDENTIFICATION No. UN1950

2 HAZARDS 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 reach of children.

PHYSICAL AND CHEMICAL HAZARDS

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

HUMAN HEALTH

Splashes in the eyes may cause redness and irritation. Keep out of reach of children. See section 11 for additional information on health hazards.

POTENTIAL HEALTH EFFECTS

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.

CARCINOGENICITY

This substance has no evidence of carcinogenic properties.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
d-LIMONENE	227-813-5	5989-27-5	60-100%
HFC-134a Tetrafluoroethane	212-377-0	811-97-2	10-30%

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest EC Directives.

4 FIRST-AID MEASURES

GENERAL INFORMATION

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

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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 they are unconscious. Consult a physician for specific advice.

SKIN CONTACT

Wash the skin immediately with soap and water. Get medical attention if any discomfort 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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

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.

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.

PROTECTIVE MEASURES IN FIRE

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

FLAMMABILITY LIMIT - LOWER(%)	.7
FLAMMABILITY LIMIT - UPPER(%)	6.0
FLASH POINT (°C)	47 C / 117 F TCC (Tag closed cup).

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

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

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.

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 reach of children.

STORAGE

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

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT


ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

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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.

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 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

APPEARANCE	Liquid
COLOR	Colorless to pale yellow
ODOR	Characteristic Orange
PHYSICAL DATA COMMENTS	Aerosol
VOLATILITY DESCRIPTION	Volatile.
SOLUBILITY	Insoluble in water

BOILING POINT (°C)	169 - 187 C / 340 - 372 F	**VAPOR DENSITY (air=1)**	4.6
VAPOR PRESSURE	1.6 mm Hg 20 C / 70 F	**VOLATILE BY VOL. (%)**	100
FLASH POINT (°C)	47 C / 117 F TCC (Tag closed cup).		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

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

HAZARDOUS POLYMERISATION

Will not polymerize.

MATERIALS TO AVOID

Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Vapors/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO_2). Hydrogen fluoride (HF).

11 TOXICOLOGICAL INFORMATION

Name	d-LIMONENE
Name	HFC-134a Tetrafluoroethane
Toxic Dose 1 - LD 50	>2085 mg/kg (oral rat)

CARCINOGENICITY

This substance has no evidence of carcinogenic properties.

12 ECOLOGICAL INFORMATION

Name	d-LIMONENE
	HFC-134a Tetrafluoroethane
LC 50, 96 hrs, Fish mg/l	450
EC 50, 48 hrs, Daphnia, mg/l	980

13 DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT

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

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DISPOSAL METHODS

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME	Aerosols, Flammable		
DOT PROPER SHIPPING NAME	Consumer Commodity ORM-D		
DOT PROPER SHIPPING NAME	Aerosols, Flammable		
IDENTIFICATION No.	UN1950	**PACKAGING INSTRUCTIONS**	203 (air transport)
MFAG	See Subsection 4.2 of MFAG.	**UN NO. AIR**	UN1950
AIR CLASS	2.1	**AIR SUB CLASS**	N/A
AIR PACK GR.	N/A		

15 REGULATORY INFORMATION

INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
d-LIMONENE	DSL	Yes						
HFC-134a Tetrafluoroethane	DSL	Yes						

COMPONENT	TSCA 12(b) Export Notification
HFC-134a Tetrafluoroethane	No

SARA (311/312) HAZARD CATEGORIES

Acute Chronic Fire

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).

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY

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.

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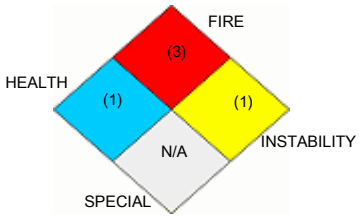
16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

HEALTH		1
FLAMMABILITY		3
PHYSICAL		1
PERSONAL PROTECTION		B

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



REVISION COMMENTS

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

REVISION DATE	18/03/2010
VERSION No.	2
DATE	October 1, 2009