



SAFETY DATA SHEET

MRA - MOLD RELEASE AGENT AEROSOL

According to Regulation (EU) No 453/2010
According to Regulation (EC) No 1907/2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	MRA - MOLD RELEASE AGENT AEROSOL		
PRODUCT NO.	MCC-MRA12A		
APPLICATION	Cleaning agent.		
SUPPLIER	MICROCARE EUROPE BVBA	MANUFACTURER	MICROCARE CORPORATION
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			techsupport@microcare.com

2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

CLASSIFICATION (1999/45) Not classified.

ENVIRONMENT

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

PHYSICAL AND CHEMICAL HAZARDS

Vapours are heavier than air and may travel along the floor and in the bottom of containers. Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small. Gas or vapour displaces oxygen available for breathing (asphyxiant).

HUMAN HEALTH

Prolonged skin contact may cause redness, irritation and dry skin. Mild dermatitis, allergic skin rash.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content %	Classification (67/548/EEC)
DIMETHYL ETHER	204-065-8	115-10-6	10-30%	F+;R12

The Full Text for all R-Phrases is Displayed in Section 16

4 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.

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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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

SPECIAL FIRE FIGHTING PROCEDURES

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

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.

PROTECTIVE MEASURES IN FIRE

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 vapours. Use approved respirator if air contamination is above accepted level.

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.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Provide good ventilation. Avoid inhalation of vapours/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 PRECAUTIONS

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

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
DIMETHYL ETHER	WEL	400 ppm	766 mg/m ³	500 ppm	958 mg/m ³	

WEL = Workplace Exposure Limit.

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. Vapours 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.

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.

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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	Oily Clear liquid.
COLOUR	Colourless.
ODOUR	Slight odour. Ether
PHYSICAL DATA COMMENTS	Aerosol.
VOLATILITY DESCRIPTION	Volatile
SOLUBILITY	Slightly soluble in water.
UDF Phrase 1	This product is not flammable.
BOILING POINT (°C)	-25 C / -13 F
VAPOUR DENSITY (air=1)	2.0
VAPOUR PRESSURE	64 psig @ 70 F

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

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

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Alkali metals. Alkali earth metals. Powdered metal.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11 TOXICOLOGICAL INFORMATION

INHALATION

Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

SKIN CONTACT

Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

EYE CONTACT

May cause temporary eye irritation.

OTHER HEALTH EFFECTS

This substance has no evidence of carcinogenic properties.

MEDICAL SYMPTOMS

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Name	DIMETHYL ETHER
Name	HFC-134a Tetrafluoroethane
Toxic Dose 1 - LD 50	>2085 mg/kg (oral rat)
Other Health Effects	
	This substance has no evidence of carcinogenic properties.
Name	1,1-Difluoroethane

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12 ECOLOGICAL INFORMATION

WATER HAZARD CLASSIFICATION

N/A.

Name	DIMETHYL ETHER
	HFC-134a Tetrafluoroethane
LC 50, 96 Hrs, Fish mg/l	450
EC 50, 48 Hrs, Daphnia, mg/l	980
Name	1,1-Difluoroethane

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

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



PROPER SHIPPING NAME	AEROSOLS
PROPER SHIPPING NAME	CONSUMER COMMODITY ORM-D
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT	No.
UN NO. ROAD	UN1950
ADR CLASS NO.	2.2
ADR PACK GROUP	N/A
ADR LABEL NO.	3
HAZCHEM CODE	N/A
UN NO. SEA	1950
IMDG CLASS	2.2
IMDG PACK GR.	N/A
UN NO. AIR	1950
AIR CLASS	2.2
AIR SUB CLASS	N/A
AIR PACK GR.	N/A

15 REGULATORY INFORMATION

RISK PHRASES

NC Not classified.

SAFETY PHRASES

S2 Keep out of the reach of children.
P13 Safety data sheet available for professional user on request.
A1 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2 Do not spray on a naked flame or any incandescent material.

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EU DIRECTIVES

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

NATIONAL REGULATIONS

The Aerosol Dispensers (EEC Requirements)(Amendment) Regulations 1996 (S.I 1996 No. 2421).

16 OTHER INFORMATION

REVISION COMMENTS

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

REVISION DATE 19/08/2009

REV. NO./REPL. SDS 2

GENERATED

SAFETY DATA SHEET STATUS

Approved.

DATE 08-05-09

RISK PHRASES IN FULL

R12 Extremely flammable.

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.