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MATERIAL SAFETY DATA SHEET

Preparation date: 01/11/07
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1. Chemical Product and Company Identification

Product: MRF Mold Release Agent, Special Food Grade Formula
Packaged By: MicroCare Corp., 595 John Downey Drive, New Britain, CT, 06051, USA CAGE/FSCM: OATV9
Emergency Telephone: CHEMTREC (800) 424-9300

2. Composition/Information on Ingredients

Chemical Name	Wt.%Range	TLV Units
Tetrafluoroethane CAS # 811-97-2	<10.0	See Section 8
Methane, oxybis- CAS # 115-10-6	20.0-30.0	See Section 8
1,1-Difluoroethane CAS #75-37-6	60.0-80.0	See Section 8

All components of this material are listed on the TSCA inventory.

3. Hazard Identification

Emergency Overview: Colorless liquid with a slight ethereal odor under pressure in an aerosol can. Residue from spray is a light oily film. This product is nonflammable per ASTM D3065-01. Liquid or vapor contact with skin and eyes may cause severe irritation, tearing, blurred vision and possible freeze burns. Product vapors displace air and can cause asphyxiation especially in confined spaces.

Potential Health Effects:

Eyes: Contact with liquid or vapors may cause severe irritation, redness, tearing, blurred vision and possible freeze burns. Persons wearing contact lenses should wear chemical protective safety glasses when exposed to this product.

Skin: May cause freezing of the skin (frostbite) or irritation.

Ingestion: Not a likely route of entry.

Inhalation: Overexposure by inhalation of concentrated vapors may cause respiratory irritation, nausea, headache and dizziness. Inhalation may produce anesthetic effects and feeling of euphoria. Intentional misuse or deliberate inhalation may cause death without warning.

Medical Conditions Aggravated by Exposure: Preexisting disease of the heart, lungs, skin and eyes.

4. First Aid Measures

Eyes: Immediately flush with water. Remove any contact lenses and continue flushing for 15 minutes, lifting eyelids occasionally until no evidence of the chemical remains. If frostbite occurs or irritation develops or persists, call a physician.

Skin: Wash affected area promptly with soap and water. Treat as frostbite. If irritation develops or there is evidence of tissue damage, seek medical attention. Remove contaminated clothing and shoes and replace with clean clothing.

Ingestion: Unlikely route of exposure. DO NOT induce vomiting unless instructed to do so by a physician. Administer oxygen and seek immediate medical attention.

Inhalation: Remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

5. Firefighting Measures

Flash Point: Not flammable per flame projection test; ASTMD3065-01.

Flammable Limits in Air: LEL/UEL: Not determined

Extinguishing Media: CO₂, dry chemical, water spray, water fog

Special Firefighting Procedures: Contents under pressure. Evacuate personnel. Wear self contained breathing apparatus (SCBA) and full protective equipment. Containers generate pressure when heated causing violent bursting and dangerous propelling of container. May form toxic decomposition products above 480° F/ 250° C Under fire conditions, empty containers retain product residue and can be dangerous. Discharged material may create an oily film on floor surfaces resulting in slippery walking conditions

6. Accidental Release Measures

Spill or Leak: Evacuate area, absorb spilled liquid with commercial, nonflammable absorbent i.e. sand, vermiculite. Remove unprotected personnel. Protected personnel should remove ignition sources and shut off fire sources. Provide ventilation. Shovel (spark proof) absorbent material into drums and close. Do not flush to sewer.

7. Handling and Storage

Keep away from children. Avoid breathing vapors or mist. Use only with adequate ventilation. Avoid repeated or prolonged contact with eyes, skin or clothing. Wash thoroughly after handling. Do not store in direct sunlight. Store in cool dry place, away from heat, sparks or flames which may generate toxic decomposition products. Vapors are heavy and may concentrate in low poorly ventilated areas.

8. Exposure Controls/Personal Protection

Respiratory Protection: Use only with adequate ventilation. Keep container tightly closed. Use approved NIOSH self-contained or supplied air respirators for emergencies and in situations where air may be displaced by vapors.

Eye Protection: Use chemical protective safety glasses.

Protective Clothing: Where there is potential for skin contact, use appropriate impervious gloves, apron, pants and jacket.

Exposure Guidelines: Applicable Exposure Limits.

1,1-Difluoroethane:

PEL (OSHA)	None Established
AEL (DuPont)	1,000 ppm, 8 hr. TWA
TLV (ACGIH)	None Established

Methane, oxybis-:

PEL (OSHA)	None Established
TLV (ACGIH)	None Established
AEL (DuPont)	1,000 ppm, 8 & 12 hour TWA

Tetrafluoroethane:

AEL(OSHA)	1,000 ppm TWA
PEL (OSHA)	1,000 ppm STEL
TLV (ACGIH)	1,000 ppm TWA

NFPA, NPCA-HIMIS RATING:

Health	1
Flammability	2
Reactivity	1

Personal Protection rating to be supplied by user depending on use conditions.

9. Physical and Chemical Properties

Physical Form:	Clear colorless liquid with light oily residue
Odor:	Slight Ethereal
Boiling Point:	-25° C / -13° F
Solubility in Water:	2.1%
% Volatile by Weight:	<100%
Vapor Pressure:	64 psig at 70° F
Vapor Density (air=1):	2.0

10. Reactivity

Chemical Stability: Material is stable.

Hazardous Polymerization: Will not occur.

Incompatibilities: Alkali or alkaline earth metals powdered Al, Zn, Be, Na, Mg, etc.

Decomposition Products: Decomposes with heat. High temperatures (open flame, glowing metal surfaces, etc.) can decompose forming hydrofluoric acid and fluorine compounds.

11. Toxicological Information

Toxicity information for the individual components of this product are listed below.

Component Analysis:

Ingredients	LC50
Tetrafluoroethane	1500 mg/m3 rat
Methane, oxybis-	64000 ppm rat; 64000 mg/l/4h rat
1,1-Difluoroethane	308.5 mg/m3 rat; 308.5 mg/l/4h rat

Ingredients Oral LD50

Tetrafluoroethane	Not Available
Methane, oxybis-	Not Available
1,1-Difluoroethane	Not Available

Carcinogenicity: None of the components present in this material are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. Ecological Information**Aquatic Toxicity:**

This material is not expected to be harmful to aquatic life.

13. Disposal Considerations

Waste Disposal: Do not puncture or incinerate container. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

14. Transportation Information

Ground Transport: Consumer Commodity ORM-D.

Air Transport: Aerosols Nonflammable NOS, UN1950, Class 2.2, Pkg. Group N/A, Pkg.Instr. 203 Hazard Label: Nonflammable Gas

15. Regulatory Information

Section 313 Supplier Information: This material contains the following toxic chemicals subject to the emergency reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40 CFR 372:

CAS#	Chemical Name	% by Weight
	None	

This information must be included in all MSDSs that are copied and distributed for this material.

Title III Hazard Communications Sections 311, 312

Acute	Yes
Chronic	No
Fire	No
Reactivity	No
Pressure	Yes

Lists:

SARA Extremely Hazardous Substance	No
CERCLA Hazardous Substance	No
SARA Toxic Chemicals	No

16. Other Information

For additional information, contact Tech Support at MicroCare: Telephone (860) 827-0626 or email: techsupport@microcare.com