

SAFETY DATA SHEET

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

Product name: **Freezer**
 Supplier: MMP-International, Division
 of ITW Ltd.
 Brunel Close, Park Farm
 Ind Est,
 Wellingborough, Northants,
 NN8 6QX

Emergency telephone number: +44 (0) 1933 670870
 Fax No: +44 (0) 1933 670800

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
1,1,1,2-TETRAFLUOROETHANE	811-97-2			60-80
BUTANE	106-97-8	601-004-00-0	F+; R12	1-5
PROPANE	74-98-6	601-003-00-5	F+; R12	1-5

3. HAZARDS IDENTIFICATION

Most important hazards: not a dangerous substance as defined in the above regulations

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.
 Inhalation: Move to fresh air in case of accidental inhalation of vapours, Consult a physician if necessary.
 Skin contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
 Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: alcohol-resistant foam, Carbon Dioxide (CO₂), powder, Water spray.

Extinguishing media which must not be used for safety reasons:

None

Specific hazards: Burning produces irritant fumes.

Special protective equipment for firefighters: In case of fire, wear a self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Use personal protective equipment.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Clean with detergents. Avoid solvents.

7. HANDLING AND STORAGE

Handling: Keep product and empty container away from heat and sources of ignition.

Storage: Keep at temperatures below 50.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: National occupational exposure limits (Ref: British COSHH - EH40):

1,1,1,2-TETRAFLUOROETHANE 1000ppm

Product name: Freezer

BUTANE	600ppm
PROPANE	Asphyxiant.
Engineering measures to reduce exposure	Ensure adequate ventilation, especially in confined areas.
- Respiratory protection:	Breathing apparatus with filter.
- Hand protection:	gloves.
- Eye protection:	safety glasses with side-shields.
- Skin and body protection:	lightweight protective clothing.
Hygiene measures:	When using do not eat or drink, Do not smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid - aerosol.	Colour:	colourless.	Odour:	slightly sweet, ether-like.
	g/l H ₂ O)				
Boiling point/range:	-24.7	°C			
Flash point:	N/A	°C			
Flammability (solid, gas):	LEL 0.8 (% VOL IN AIR AT 25°C)	UEL 9.0			
Oxidizing properties:	None				
Vapour pressure:	6.89 bar				

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to avoid:	None
Materials to avoid:	oxidizing agents, strong acids and strong bases.
Hazardous decomposition products:	hydrogen halides, carbonyl halides.

11. TOXICOLOGICAL INFORMATION

Local effects:	May cause sensitization by inhalation.
Sensitization:	Prolonged exposure May cause sensitization of susceptible persons by skin contact or by inhalation of aerosol or dust. May cause eye irritation with susceptible persons.

12. ECOLOGICAL INFORMATION

Mobility:	Do not contaminate water.
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13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:	Empty containers can be landfilled, when in compliance with local regulations.
Contaminated packaging:	Can be incinerated, when in compliance with local regulations.
European waste Catalogue No:	08 04 99

14. TRANSPORT INFORMATION

Proper shipping name:	Aerosol		
UN-No:	1950		
ADR/RID Class:	2	HI/UN No:	1950
IMO Class:	2		
Proper shipping name:	Aerosol		
ICAO Class:	2	UN/ID No:	1950
Proper shipping name:	Aerosol		

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC

- Contains: 1,1,1,2-TETRAFLUOROETHANE (R134a)
- Symbol(s):

R -phrase(s):

S -phrase(s): S2 - Keep out of reach of children. S51 - Use only in well ventilated areas. S23 - Do not breathe vapour.

16. OTHER INFORMATION

Recommended use:

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components.

Revision date: 09/07/2002

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication