



SAFETY DATA SHEET

FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER

According to Regulation (EC) No 1907/2006

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

PRODUCT NAME	FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER		
PRODUCT NO.	MCC-FRZA		
SYNONYMS, TRADE NAMES	MCC-DST, MCC-DSTZ, MCC-AIR, MCC-AIRZ, MCC-DSTZ14, MCC-DST14A		
SUPPLIER	MANUFACTURER		
	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	MICROCARE EUROPE BVBA Erasmuslaan 10 B-1804 Cargovil (Zemst) Belgium 0032 2 251 95 05 0032 2 759 80 27 techsupport@microcare.com	

2 HAZARDS IDENTIFICATION

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

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)
PROPAN-2-OL	200-661-7	67-63-0	1-5%	F;R11 Xi;R36 R67

The Full Text for all R-Phrases are 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

Move into fresh air and keep at rest. If respiratory problems, artificial respiration/oxygen.

INGESTION

Do not induce vomiting. Immediately rinse mouth and drink plenty of water (200-300 ml). Consult a physician for specific advice.

SKIN CONTACT

Remove contaminated clothes and rinse skin thoroughly with water.

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

FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER

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

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

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
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	

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

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.

EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable.

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.

FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER

SKIN PROTECTION

Wear apron or protective clothing in case of splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid Gas		
COLOUR	Colourless		
ODOUR	Slight odour of alcohol		
PHYSICAL DATA COMMENTS	Aerosol		
VOLATILITY DESCRIPTION	Volatile.		
SOLUBILITY	Slightly soluble in water.		
Flammability	This product is not flammable.		
BOILING POINT (°C)	-26.5 C / -15.7 F	VAPOUR DENSITY (air=1)	3.6 @ 25 C / 77 F
VAPOUR PRESSURE	96 PSIA 25 C / 77 F	VOLATILE BY VOL. (%)	100
FLAMMABILITY LIMIT - LOWER(%)	N A	FLAMMABILITY LIMIT - UPPER(%)	N A

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	PROPAN-2-OL
Toxic Dose 1 - LD 50	5045 mg/kg (oral rat)
Toxic Dose 2 - LD 50	3600 mg/kg (oral-mouse)
Toxic Conc. - LC 50	16,000 ppm/1h (inh-rat)
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.

12 ECOLOGICAL INFORMATION

FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER

Name	PROPAN-2-OL
LC 50, 96 Hrs, FISH mg/l	9,640
EC 50, 48 Hrs, DAPHNIA, mg/l	5102
IC 50, 72 Hrs, ALGAE, mg/l	>2,000
Name	HFC-134a Tetrafluoroethane
LC 50, 96 Hrs, FISH mg/l	450
EC 50, 48 Hrs, DAPHNIA, mg/l	980

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.

14 TRANSPORT INFORMATION



PROPER SHIPPING NAME	AEROSOLS		
PROPER SHIPPING NAME	CONSUMER COMMODITY ORM-D		
UN NO. ROAD	UN1950	ADR CLASS NO.	2.2
ADR LABEL NO.	3	HAZCHEM CODE	N/A
CEFIC TEC(R) NO.	20G53	RID CLASS NO.	2.2
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.
S3 Keep in a cool place.
S3/9 Keep in a cool, well ventilated place.
P13 Safety data sheet available for professional user on request.

EU DIRECTIVES

System of specific information relating to Dangerous Preparations. 2001/58/EC.

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.

FRZA - ANTI-STAT MICRO FREEZE CIRCUIT COOLER

REVISION DATE 05/10/2010

REV. NO./REPL. SDS 2

GENERATED

SAFETY DATA SHEET STATUS

Approved.

DATE October 12, 2009

RISK PHRASES IN FULL

R11 Highly flammable.

R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

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.