



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Number 1
Revision date 05/01/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name TERGO™ XCF1
Product Code(s) MCC-TXCF1D, MCC-TXCF1P, MCC-TXCF1L, MCC-TXCF1GL
Safety data sheet number BULK-TXCF1
Unique Formula Identifier (UFI) 3D40-X0SA-4002-JUCV
Pure substance/mixture Mixture

Contains (Z)-1-chloro-2,3,3-trifluoropropene

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Cleaning agent
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

MicroCare UK Ltd
Unit 4, Whitehall Court
Leeds
LS12 5SN
United Kingdom
Tel: +44 (0) 113 3609019
Email: MCCEurope@MicroCare.com
For further information, please contact

Contact Point el: +44 (0) 113 3609019
E-mail address mcceurope@microcare.com

1.4. Emergency telephone number

Emergency Telephone INFOTRAC +44 330 027 0156 (UK)
1-352-323-3500 (from anywhere in the world)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No. 1272/2008 [CLP]

Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains (Z)-1-chloro-2,3,3-trifluoropropene



Signal word

Warning

Hazard statements

H336 - May cause drowsiness or dizziness

H412 - Harmful to aquatic life with long lasting effects

EUH210 - Safety data sheet available on request

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P312 - Call a POISON CENTER or doctor if you feel unwell.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 - Dispose of contents/ container to an approved waste disposal plant.

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

No information available.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
(Z)-1-chloro-2,3,3-trifluoropropene 1263679-68-0	50 - <100%	01-2120811806-55-00 00	824-458-3	Aquatic Chronic 3 (H412) STOT SE 3 (H336)	-	-	-
(E)-1-chloro-2,3,3-trifluoropropene 1263679-71-5	10 - <25%	01-2120811806-55-00 00	-	Aquatic Chronic 3 (H412) STOT SE 3 (H336)	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Effects of Exposure	None.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
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Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Hydrogen chloride. Hydrogen fluoride.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510) LGK 10.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Supplier OEL
(Z)-1-chloro-2,3,3-trifluoropropene 1263679-68-0	TWA: 250 ppm

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls	No information available.
Personal protective equipment Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid	
Colour	colourless	
Odour	Slight. Solvent.	
Odour threshold	No information available	
Property	Values	Remarks • Method
Melting point / freezing point	-82.28 °C	None known
Initial boiling point and boiling range	54 °C	None known
Flammability	No data available	Not flammable
Flammability Limit in Air		
Upper flammability or explosive limits	14% at 60°C (ASTM E681)	
Lower flammability or explosive limits	7% at 60°C (ASTM E681)	
Flash point	No data available	Does not flash, Tag closed cup (ASTM D 56)
Autoignition temperature	446 °C	
Decomposition temperature		
pH	No data available	
pH (as aqueous solution)	No data available	
Kinematic viscosity	0.57 cSt at 25°C	
Dynamic viscosity	No data available	
Water solubility		
Solubility(ies)	No data available	
Partition coefficient	No data available	
Vapour pressure	240 mmHg at 25°C	
Relative density	No data available	
Bulk density	No data available	
Liquid Density	1.39	
Relative vapour density	No data available	
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

Volatility	100%
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9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	May cause drowsiness or dizziness.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapour)	99,999.00 mg/l

Oral LD50 > 2000 mg/kg (rat)

Inhalation LC50 > 10000 ppm

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
(Z)-1-chloro-2,3,3-trifluoropropene	1.9

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the

threshold of declaration.

Chemical name	PBT and vPvB assessment
(Z)-1-chloro-2,3,3-trifluoropropene	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not applicable
 14.2 UN proper shipping name Not applicable
 14.3 Transport hazard class(es) Not applicable
 14.4 Packing group Not applicable
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user Not applicable

IMDG

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not applicable
 14.3 Transport hazard class(es) Not applicable
 14.4 Packing group Not applicable
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user Not applicable
 14.7 Maritime transport in bulk according to IMO instruments Not applicable

ADR

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not applicable
 14.3 Transport hazard class(es) Not applicable
 14.4 Packing group Not applicable
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Germany

Water hazard class (WGK) non-hazardous to water (nwg)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H336 - May cause drowsiness or dizziness
H412 - Harmful to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation
+	Sensitisers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	On basis of test data
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	On basis of test data
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method

Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	On basis of test data
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 05/01/2024

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Disclaimer

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet