KONTAKT CHEMIE ®

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation

FREEZE 75

of the mixture

Registration number

UFI: 3E2X-18SW-P001-30PR

Synonyms None.

Product code BDS002497AE Issue date 15-March-2022

Version number 1.0

Revision date 15-March-2022

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

Identified usesCooling agentUses advised againstNone known.

1.3. Details of the supplier of the safety data sheet

Company name CRC Industries Europe by

Address Touwslagerstraat 1

9240 Zele Belgium

Telephone +32(0)52/45.60.11

hse@crcind.com www.crcind.com

Company name CRC Industries UK Ltd.

Address Wylds Road

Castlefield Industrial Estate TA6 4DD Bridgwater Somerset

United Kingdom +44 1278 727200

Fax +44 1278 425644

E-mail hse.uk@crcind.com

Website www.crcind.com

1.4. Emergency telephone

Telephone

number

Tel.:(+44)(0)1278 72 7200 (office hours: 9-17h CET)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word Warning

Hazard statements

H229 Pressurized container: May burst if heated.

Precautionary statements

Prevention

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

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Response

Thaw frosted parts with lukewarm water. Do not rub affected area. P336

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P410 + P412

Disposal Not assigned.

Supplemental label information Avoid contact with skin and eyes, in case of contact with liquid product frostbite symptoms may

occur.

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation

(EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
(E)-1,3,3,3-tetrafluoroprop-1-ene	75 - 100	29118-24-9 471-480-0	01-0000019758-54	-	
Classification: -					

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

4.1. Description of first aid measures

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist. Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Exposure may cause temporary irritation, redness, or discomfort.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

4.2. Most important symptoms and effects, both acute and

delayed

Treat symptomatically.

4.3. Indication of any immediate medical attention

and special treatment needed

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing

media Unsuitable extinguishing

media

Water. Alcohol resistant foam. Carbon dioxide (CO2). Dry sand.

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting

Containers should be cooled with water to prevent vapour pressure build up.

procedures Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Wear appropriate personal protective equipment.

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the For emergency responders

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6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled

material. This product is miscible in water.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10 of the

Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits noted for ingredient(s).

Follow standard monitoring procedures.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring

procedures

Derived no effect levels

(DNELs)

Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Personal protection equipment should be chosen according to the CEN standards and in **General information**

discussion with the supplier of the personal protective equipment.

Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166. Eye/face protection

Skin protection

For incidental contact with the product wear chemical-resistant gloves (standard EN 374). The use - Hand protection

of disposable gloves is acceptable provided that they are changed immediately after a splash or

spill. Viton gloves are recommended.

Not available. - Other

In case of insufficient ventilation, wear suitable respiratory equipment. Recommended respiratory Respiratory protection

protection: Compressed air.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

When using do not smoke. Always observe good personal hygiene measures, such as washing Hygiene measures

after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or

engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid.

Form Compressed liquefied gas.

Colour Colourless.

Material name: FREEZE 75 - Kontakt chemie - Europe SDS GREAT BRITAIN Odour Neutral. **Odour threshold** Not available. Not applicable. Melting point/freezing point Not available.

Initial boiling point and boiling

range

-19 °C (-2.2 °F)

Flash point None

Not applicable. **Evaporation rate** Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

No LEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in

excess of 28°C.

Flammability limit - upper

(%)

No UEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in

excess of 28°C.

420 kPa at 20°C Vapour pressure Vapour density Not available. Relative density 1.18 g/cm3 at 20°C

Solubility(ies)

Partly soluble in water Solubility (water)

288 - 293 °C (550.4 - 559.4 °F) **Auto-ignition temperature**

Decomposition temperature Not available. Not available. Viscosity **Explosive properties** Not explosive. Oxidising properties Not oxidising

9.2. Other information

Aerosol spray enclosed space

 $> 300 \text{ s/m}^3$ Time equivalent < 15 cm Aerosol spray ignition

distance

Heat of combustion < 20 kJ/g1180 g/l VOC

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid Avoid high temperatures. Avoid temperatures exceeding the decomposition temperature.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous Carbon oxides. HF may be formed. decomposition products

SECTION 11: Toxicological information

Occupational exposure to the substance or mixture may cause adverse effects. General information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Eye contact Based on available data, the classification criteria are not met. Skin contact Based on available data, the classification criteria are not met.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of

occupational exposure.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met. Skin corrosion/irritation Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Serious eye damage/eye

irritation

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Respiratory sensitisation Based on available data, the classification criteria are not met.

Skin sensitisationBased on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard Not likely, due to the form of the product.

Mixture versus substance

information

Not available.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2. Persistence and

degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential No data available. **Partition coefficient** Not available.

n-octanol/water (log Kow)

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation

(EC) No 1907/2006, Annex XIII.

12.6. Other adverse effectsThe product contains volatile organic compounds which have a photochemical ozone creation

potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

EU waste codeThe Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance

with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN1950 **14.2. UN proper shipping** AEROSOLS

name

14.3. Transport hazard class(es)

Class 2.2 Subsidiary risk -

Hazard No. (ADR) Not available.

Tunnel restriction code (E)

14.4. Packing group Not applicable

14.5. Environmental hazards No

14.6. Special precautions

Read safety instructions, SDS and emergency procedures before handling.

for user

RID

14.1. UN number UN1950

14.2. UN proper shipping AEROSOLS, flammable

name

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14.3. Transport hazard class(es)

Class Subsidiary risk 2.1 Label(s)

14.4. Packing group Not available.

14.5. Environmental hazards No.

Read safety instructions, SDS and emergency procedures before handling. 14.6. Special precautions

for user

ADN

14.1. UN number UN1950

14.2. UN proper shipping AEROSOLS, flammable

14.3. Transport hazard class(es)

Class 2.2 Subsidiary risk 2.1 Label(s)

Not available. 14.4. Packing group

14.5. Environmental hazards No.

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

IATA

UN1950 14.1. UN number **AEROSOLS** 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

Class 2.2 Subsidiary risk

Not applicable 14.4. Packing group

14.5. Environmental hazards No

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

IMDG

UN1950 14.1. UN number **AEROSOLS** 14.2. UN proper shipping

name

14.3. Transport hazard class(es)

Class 2.2 Subsidiary risk

14.4. Packing group Not applicable

14.5. Environmental hazards

Marine pollutant No **EmS** F-D.S-U

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC

Code

ADN; ADR; IATA; IMDG; RID



SECTION 15: Regulatory information

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

Not applicable.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

This safety data sheet conforms to the following laws, regulations and standards:

Act on the management of packaging and packaging waste of June 13, 2013

Regulation of the Minister of Health of June 11, 2012 on the categories of dangerous substances and dangerous preparations whose packaging should be fitted with child-resistant closures and a tactile warning of danger

REGULATION OF THE MINISTER OF HEALTH of February 2, 2011 on tests and measurements of factors harmful to health in working environments

Regulation of Ministry of Labor and Social Policy of June 6, 2014. On the matter of maximum permissible concentrations and intensities of harmful factors in the work environment (Journal of Laws 2014, item. 817)

Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices Decree No. 25/2000. (IX. 30.) EüM-SzCsM of the Minister of Health and the Minister of Social and Family Affairs on chemical safety at work

Act No. 93 of 1993 on Labour Safety (1993.évi XCIII.), as amended

Government Decree No. 220 of 2004 (VII. 21.) providing rules on the protection of surface waters quality

Government Decree No. 98/2001 (VI. 15.), on the conditions of the activities related to hazardous waste, and Ministry of Environmental Affairs Decree No. 16/2001 (VII. 18.), on the register of wastes

Public Act No. XXV of 2000 on Chemical Safety, and Application Decree No. 44/2000. (XII.27.) EüM [of the Ministry of Health] Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

CAS: Chemical Abstract Service.

Ceiling: Short Term Exposure Limit Ceiling value.

CEN: European Committee for Standardization.

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.

GWP: Global Warming Potential.

IATA: International Air Transport Association.

IBC: Intermediate Bulk Container.

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IMDG: International Maritime Dangerous Goods.

MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative, toxic.

REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals). RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement

International concernant le transport de marchandises dangereuses par chemin de fer). RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TLV: Threshold Limit Value.

TWA: Time Weighted Average. VOC: Volatile organic compounds.

vPvB: Very persistent and very bioaccumulative.

STEL: Short-term Exposure Limit.

References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

None.

Not available.

Revision information

Training information

Disclaimer

None. Follow training instructions when handling this material.

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