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

1.1. Product identifier

FREEZE NF
Aerosol

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

Cleaners - Precision

1.3. Details of the supplier of the safety data sheet

CRC Industries Europe bvba
Touwslagerstraat 1
9240 Zele
Belgium
Tel.: +32(0)52/45.60.11
Fax.: +32(0)52/45.00.34
E-mail : hse@crcind.com

Subsidiaries		Tel	Fax
CRC Industries Finland Oy	Laurinkatu 57 A 23 B, 08100 Lohja	+358/(19)32.921	
CRC Industries France	6, avenue du marais, C.S. 90028, 95102 Argenteuil Cedex	01.34.11.20.00	01.34.11.09.96
CRC Industries Deutschland GmbH	Südring 9, D-76473 Iffezheim	(07229) 303 0	(07229)30 32 66
CRC INDUSTRIES IBERIA S.L.U.	GREMIO DEL CUERO-PARC.96, POLIGONO INDUSTR. DE HONTORIA, 40195 SEGOVIA	0034/921.427.546	0034/921.436.270
CRC Industries Sweden	Laxfiskevägen 16, 433 38 Partille	0046/31 706 84 80	0046/31 27 39 91

1.4. Emergency telephone number

CRC Industries Europe, Belgium: Tel.: +32(0)52/45.60.11 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical: Aerosol, category 3
Pressurised container: May burst if heated.

Health:	Not classified
Environment:	Not classified
Other hazards :	Avoid contact with skin and eyes, in case of contact with liquid product frostbite symptoms may occur.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Product identifier:

Signal word:	Warning
Hazard statement(s):	H229 : Pressurised container: May burst if heated.
Precautionary statement(s):	P102 : Keep out of reach of children.
	P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 : Do not pierce or burn, even after use.
	P336 : Thaw frosted parts with lukewarm water. Do no rub affected area.
	P410/412 : Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Supplemental Hazard information:	Avoid contact with skin and eyes, in case of contact with liquid product frostbite symptoms may occur.

2.3. Other hazards

In case of contact with liquid product frostbite symptoms may occur.
Aerosols may explode if heated above 50°C

SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
trans-1,3,3,3-tetrafluoroprop-1-ene	01-0000019758-54	29118-24-9	471-480-0	100	Press. Gas	H280	

(* Explanation phrases : see chapter 16)

3.2. Mixtures

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with eyes :	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
Contact with skin :	In case of contact with liquid, thaw frosted parts with water, remove clothing carefully and wash with soap & water Seek medical advice
Inhalation :	Fresh air, keep warm and at rest.
Ingestion :	In case of accident or if you feel unwell, seek medical advice (show the label where possible)

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

Inhalation :	Excessive inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion :	Not available.
Skin contact :	In case of contact with liquid product frostbite symptoms may occur.
Eye contact :	In case of contact with liquid product frostbite symptoms may occur.

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

General Advice :	In case of accident or if you feel unwell, seek medical advice (show the label where possible) If symptoms persist always call a doctor

SECTION 5: Firefighting measures

5.1. Extinguishing media

water, foam, carbon dioxide or dry agent

5.2. Special hazards arising from the substance or mixture

Aerosols may explode if heated above 50°C
Forms hazardous decomposition products
CO,CO2
HF may be formed under condition of fire

5.3. Advice for firefighters

Keep container(s) exposed to fire cool, by spraying with water
In case of fire, do not breathe fumes

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Shut off all ignition sources
Ensure adequate ventilation

Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Do not allow to enter public sewers and watercourses

6.3. Methods and material for containment and cleaning up

Allow product to evaporate

6.4. Reference to other sections

For further information see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat and sources of ignition
Do not spray on a naked flame or incandescent material.
Do not pierce or burn aerosols, even after use.
Do not breathe aerosols or vapours.
Ensure adequate ventilation
Avoid contact with skin and eyes.
For use on energized equipment keep ambient temperature below 28°C.

7.2. Conditions for safe storage, including any incompatibilities

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Store in a well-ventilated place.
Keep out of reach of children.

7.3. Specific end use(s)

Cleaners - Precision

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits :

No information available

8.2. Exposure controls

Control procedures :	Ensure adequate ventilation Keep away from heat and sources of ignition
Personal protection :	Take precautions to avoid contact with skin and eyes when handling the product. Ensure adequate ventilation
inhalation :	In case of insufficient ventilation, wear suitable respiratory equipment. Compressed air mask.
recommended respiratory protection:	(compressed air)
hands and skin :	For incidental contact with the product wear chemical-resistant gloves (standard EN 374). The use of disposable gloves is acceptable provided that they are changed immediately after a splash or spill. In all cases handle and use the product in accordance with good industrial hygiene practices.
Recommended gloves:	(VITON)
eyes :	Wear safety eyewear according to EN 166.
Environmental protection:	Avoid release to the environment.
Consumer exposure protection:	Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(for aerosols data for the product without propellant)

Apperance : physical state :	Liquified gas.
colour :	Colorless.
odour :	Neutral.
pH :	Not applicable.
Boiling point/range :	-19 °C
Flash point :	None
Evaporation rate :	Not applicable.
Explosion limits : upper limit :	No UEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in excess of 28°C.
lower limit :	No LEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in excess of 28°C.
Vapour pressure :	0.4192 kPa (@ 20°C).
Relative density :	1.18 g/cm3 (@ 20°C).
Solubility in water :	Partly soluble in water
Auto-ignition :	288-293 °C
Viscosity :	Not applicable.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known if used for its intended purpose

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose

10.4. Conditions to avoid

Pressurized container : protect from sunlight and do not expose to temperatures exceeding 50°C.
Avoid overheating

10.5. Incompatible materials

Strong oxidising agent

10.6. Hazardous decomposition products

CO,CO2
HF may be formed under condition of fire

SECTION 11: Toxicological information

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
serious eye damage/irritation:	based on available data the classification criteria are not met
respiratory or skin sensitisation:	based 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
toxicity for reproduction:	based on available data the classification criteria are not met
STOT-single exposure:	based on available data the classification criteria are not met
STOT repeated exposure:	based on available data the classification criteria are not met
aspiration hazard:	based on available data the classification criteria are not met

Information on likely routes of exposure:

Inhalation :	Inhalation of gas may give rise to nausea, headaches and dizziness.
Ingestion :	Ingestion is unlikely to occur
Skin contact :	In case of contact with liquid product frostbite symptoms may occur.
Eye contact :	In case of contact with liquid product frostbite symptoms may occur.

Toxicological data :

No information available

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological data:

No information available

12.2. Persistence and degradability

Not readily biodegradable

12.3. Bioaccumulative potential

For all ingredients the octanol-water partion coefficient is below 4.

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

No experimental data available

GWP (global warming potential):	7
	(calculated in accordance with Annex IV of Regulation (EU) No 517/2014 on fluorinated greenhouse gases)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product :	This material and its container must be disposed of in a safe way. Do not discharge into drains or the environment, dispose to an authorised waste collection point.
Contaminated packaging :	Disposal should be in accordance with local, state or national legislation

SECTION 14: Transport information

14.1. UN number

UN-number :	1950

14.2. UN proper shipping name

Proper shipping name:	AEROSOLS

14.3. Transport hazard class(es)

Class:	2.2
ADR/RID - Classification code:	5A

14.4. Packing group

Packing group:	Not applicable.

14.5. Environmental hazards

ADR/RID - Environmentally hazardous:	No
IMDG - Marine pollutant:	No
IATA/ICAO - Environmentally hazardous:	No

14.6. Special precautions for user

ADR/RID - Tunnelcode:	(E)
IMDG - Ems:	F-D, S-U
IATA/ICAO - PAX:	203
IATA/ICAO - CAO	203

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

The Safety Data Sheet is compiled according to the current European requirements.
Regulation (EC) No 1907/2006 (REACH)
Regulation (EC) No 1272/2008 (CLP)
Dir. 2013/10/EU, 2008/47/EC amendment of the aerosol dispenser directive 75/324/EEC.

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

*Explanation hazard statements: H280 : Contains gas under pressure; may explode if heated.
This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation.
The information contained herewith is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It does not guarantee any specific properties.
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