

Productname : N.F. Precision Cleaner
Ref.Nr.: BDS000669_3_20130911 (EN)
Creationdate : 11.09.13 Version : 2.0
Replaces: BDS000669_20120111

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

1.1. Product identifier

N.F. Precision Cleaner
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	+358/(19)383.676
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 INDUSTRI. DE HONTORIA, 40195 SEGOVIA	0034/921.427.546	0034/921.436.270
CRC Industries Sweden	Kryptogatan 14, 431 53 Mölndal	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: Hazardous to the aquatic environment, chronic category 3



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Other hazards : Harmful to aquatic life with long lasting effects.
 6 % by mass of the contents are flammable.

Classification according to 67/548/EEC or 1999/45/EC:

Health: Not classified
Physical: Not classified
Environment: R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Signal word: Warning
Hazard statement(s): H229 : Pressurised container: May burst if heated.
 H412 : Harmful to aquatic life with long lasting effects.
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.
 P410/412 : Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P501-2 : Dispose of contents/container to an authorised waste collection point.
Supplemental Hazard information: 6 % by mass of the contents are flammable.

2.3. Other hazards

None

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Hazardous ingredient	CAS-nr.	EC-nr	w/w %	symbol	R-phrases*	Notes
Reaction mass of (3R,4R)-1,1,1,2,2,3,4,5,5,5-decafluoropentane and (3S,4S)-1,1,1,2,2,3,4,5,5,5-decafluoropentane	142347-07-7	420-640-8	30-60		52/53	
tetrafluoroethane	811-97-2	212-377-0	30-60	-	-	B
methylal	109-87-5	203-714-2	1-5	F	11	B
Naphtha (petroleum), hydrotreated light	64742-49-0	931-254-9	1-5	F,Xn,N	11-38-51/53-65-67	B,P



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butan-2-ol	78-92-2	201-158-5	0-1	Xi	10-36/37-67	B
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	927-241-2	0-1	Xn	10-52/53-65-66-67	B

Explanation notes

B : substance with national established workplace exposure limit

P : not classified as carcinogen, less than 0.1% w/w benzene (Einecs-nr. 200-753-7)

Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
Reaction mass of (3R,4R)-1,1,1,2,2,3,4,5,5,5-decafluoropentane and (3S,4S)-1,1,1,2,2,3,4,5,5,5-decafluoropentane	01-2119446695-28	142347-07-7	420-640-8	30-60	Aquatic Chronic 3	H412	
Naphtha (petroleum), hydrotreated light	01-2119484651-34	64742-49-0	931-254-9	1-5	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2	H225,H315,H336,H304,H411	B,P
butan-2-ol		78-92-2	201-158-5	0-1	Flam. Liq. 3, Eye Irrit. 2, STOT SE 3, STOT SE 3	H226,H319,H335,H336	B
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	01-2119471843-32	-	927-241-2	0-1	Flam. Liq. 3, Aquatic Chronic 3, Asp. Tox. 1, STOT SE 3	H226,H412,H304,H336	B

Explanation notes

B : substance with national established workplace exposure limit

P : not classified as carcinogen, less than 0.1% w/w benzene (Einecs-nr. 200-753-7)

(* Explanation phrases : see chapter 16)

SECTION 4: First aid measures**4.1. Description of first aid measures**

Contact with eyes :	If substance has got into eyes, immediately wash out with plenty of water
Contact with skin :	Wash with plenty of soap and water.
Inhalation :	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion :	If swallowed accidentally, do not induce vomiting and seek medical advice.

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 :	May cause gastrointestinal disturbances Symptoms : sore throat, abdominal pain, nausea, vomiting
Skin contact :	Repeated exposure may cause skin dryness or cracking.
Eye contact :	May cause irritation. Symptoms : redness and pain

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)



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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

Absorb spillage in suitable inert material
Wash spill site with water and detergent

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.



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Do not pierce or burn aerosols, even after use.
 Do not breathe aerosols or vapours.
 Ensure adequate ventilation
 Avoid contact with skin and eyes.

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 :

Hazardous ingredient	CAS-nr.	method	
National established exposure limits, United Kingdom			
tetrafluoroethane	811-97-2	TWA	1000 ppm

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. Air purifying respirator equipped with organic gas/vapor cartridge (type A or AX)
hands and skin :	Wear suitable protective gloves against chemicals
eyes :	Wear safety goggles.
Environmental protection:	Avoid release to the environment. Collect spillage.

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 : Liquid under pressure.
colour : Colorless.
odour : Solvent.



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pH : Not applicable.
Boiling point/range : Not available.
Flash point : < 0 °C
Evaporation rate : Not available.
Explosion limits : upper limit : Not available.
lower limit : Not available.
Vapour pressure : Not available.
Relative density : 1.39 g/cm³ (@ 20°C).
Solubility in water : Insoluble in water
Auto-ignition : > 200 °C
Viscosity : Not available.

9.2. Other information

VOC: 1220 g/l

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

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

Inhalation : Excessive inhalation of solvent vapours may give rise to nausea, headaches



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and dizziness
Ingestion : May cause gastrointestinal disturbances
Skin contact : May cause irritation.
Eye contact : May cause irritation.

Toxicological data :

Hazardous ingredient	CAS-nr.	method	
Reaction mass of (3R,4R)-1,1,1,2,2,3,4,5,5,5-decafluoropentane and (3S,4S)-1,1,1,2,2,3,4,5,5,5-decafluoropentane	142347-07-7	LD50 oral rat	> 2000 mg/kg
		LC50 inhal.rat	114 mg/l
butan-2-ol	78-92-2	LD50 oral rat	2193 mg/kg
		LD50 derm.rabit	> 2000 mg/kg
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	> 2500 mg/m3
		LD50 derm.rabit	> 5000 mg/kg
Naphtha (petroleum), hydrotreated light	64742-49-0	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	> 20 mg/l
		LD50 derm.rabit	> 3000 mg/kg

SECTION 12: Ecological information**12.1. Toxicity**

Hazardous to the aquatic environment, chronic category 3
Harmful to aquatic life with long lasting effects.

Ecotoxicological data:

Hazardous ingredient	CAS-nr.	method	
Reaction mass of (3R,4R)-1,1,1,2,2,3,4,5,5,5-decafluoropentane and (3S,4S)-1,1,1,2,2,3,4,5,5,5-decafluoropentane	142347-07-7	LC50 fish	13 mg/l
		EC50 daphnia	11.7 mg/l
butan-2-ol	78-92-2	IC50 algae	2029 mg/l
		LC50 fish	2993 mg/l
		EC50 daphnia	308 mg/l
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-	IC50 algae	> 1000 mg/l
		LC50 fish	< 30 mg/l



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		EC50 daphnia	< 50 mg/l
Naphtha (petroleum), hydrotreated light	64742-49-0	IC50 algae	55 mg/l
		LC50 fish	> 1 mg/l
		EC50 daphnia	3.87 mg/l

12.2. Persistence and degradability

No experimental data available

12.3. Bioaccumulative potential

No experimental data available

12.4. Mobility in soil

Insoluble in water

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

No experimental data available

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)



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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 MARPOL73/78 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.
Dir. 2013/10/EU, 2008/47/EC amendment of the aerosol dispenser directive 75/324/EEC.
EU-directive 99/45/EC
Regulation (EC) No 1272/2008 (CLP)
Regulation (EC) No 1907/2006 (REACH)

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

*Explanation risk-phrases:
R10: Flammable.
R11: Highly flammable.
R38: Irritating to skin.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.
R36/37: Irritating to eyes and respiratory system.



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R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*Explanation hazard statements: H225 : Highly flammable liquid and vapour.
H226 : Flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.
H336 : May cause drowsiness or dizziness.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

REVISIONS IN CHAPTRE : 2.2. Label elements

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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