

Productname : FORMULA 1/HT
Ref.Nr.: UDS000382_3_20150223 (EN)
Creationdate : 23.02.15 Version : 1.0
Replaces: UDS000382_20120518

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

1.1. Product identifier

FORMULA 1/HT
Aerosol

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

Release Agents

1.3. Details of the supplier of the safety data sheet

CRC Industries UK Ltd.
Ambersil House - Wylds Road
Castlefield Industrial Estate
TA6 4DD Bridgwater Somerset
United Kingdom
Tel.: +44 1278 727200
Fax.: +44 1278 425644
E-mail : hse.uk@crcind.com

1.4. Emergency telephone number

(+44)(0)1278 72 7200

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical:	Aerosol, category 2 Flammable aerosol. Pressurised container: May burst if heated.
Health:	Not classified
Environment:	Hazardous to the aquatic environment, chronic category 3 Harmful to aquatic life with long lasting effects.
Other hazards :	Contains fluorinated greenhouse gases: HFC-134a

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

FLAMMABLE
Health: Not classified

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Physical: R10: Flammable.
FLAMMABLE
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

Hazard pictogram(s):



Signal word: Warning
Hazard statement(s): H223 : Flammable aerosol.
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.
P211 : Do not spray on an open flame or other ignition source.
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: Contains fluorinated greenhouse gases:
HFC-134a

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
tetrafluoroethane	811-97-2	212-377-0	30-60	-	-	B
dimethyl ether	115-10-6	204-065-8	10-30	F+	12	A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic	-	927-510-4	1-5	F,Xn,N	11-38-51/53-65-67	B
Explanation notes						
A : substance with Community workplace exposure limit						
B : substance with national established workplace exposure limit						

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Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
tetrafluoroethane	01-2119459374-33	811-97-2	212-377-0	30-60	Press. Gas	H280	B
dimethyl ether	01-2119472128-37	115-10-6	204-065-8	10-30	Flam. Gas 1, Press. Gas	H220,H280	A
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic	01-2119475515-33	-	927-510-4	1-5	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2	H225,H315,H336,H304,H411	B

Explanation notes

A : substance with Community workplace exposure limit

B : substance with national established workplace exposure limit

(* 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 If eye irritation persists: Get medical advice/attention.
Contact with skin :	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
Inhalation :	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion :	If swallowed do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention

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 :	After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia. Symptoms : sore throat, abdominal pain, nausea, vomiting
Skin contact :	May cause irritation. Symptoms : redness and pain
Eye contact :	May cause irritation. Symptoms : redness and pain

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

General Advice :	If you feel unwell, seek medical advice (show the label where possible) If symptoms persist always call a doctor
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SECTION 5: Firefighting measures

5.1. Extinguishing media

foam, carbon dioxide or dry agent

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5.2. Special hazards arising from the substance or mixture

Aerosols may explode if heated above 50°C
Forms hazardous decomposition products
CO,CO2

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
If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities

6.3. Methods and material for containment and cleaning up

Absorb spillage in suitable inert material

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
Take precautionary measures against static discharges
Equipment should be earthed
Use explosion-proof electrical/ventilating/lighting/.../equipment.
Use only non-sparking tools.
Do not breathe aerosols or vapours.
Ensure adequate ventilation
Avoid contact with skin and eyes.
Wash thoroughly after use
Wear protective gloves/protective clothing/eye protection/face protection.

7.2. Conditions for safe storage, including any incompatibilities

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Pressurized container : protect from sunlight and do not expose to temperatures exceeding 50°C.
 Keep out of reach of children.

7.3. Specific end use(s)

Release Agents

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits :

Hazardous ingredient	CAS-nr.	method	
EU established exposure limits:			
dimethyl ether	115-10-6	TWA	1000 ppm
National established exposure limits, United Kingdom			
dimethyl ether	115-10-6	TWA	400 ppm
		STEL	500 ppm
tetrafluoroethane	811-97-2	TWA	1000 ppm

8.2. Exposure controls

Control procedures :	Ensure adequate ventilation Keep away from heat and sources of ignition Take precautionary measures against static discharges
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.
hands and skin :	Wear suitable protective gloves against chemicals
Recommended gloves:	Nitrile
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 :	Brown.
odour :	Odorless.
pH :	Not applicable.
Boiling point/range :	94 °C
Flash point :	- 4 °C

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Explosion limits : upper limit : 18.6 %
lower limit : 1.1 %
Relative density : 0.88 g/cm³ (@ 20°C).
Solubility in water : Insoluble in water
Auto-ignition : > 200 °C

9.2. Other information

VOC: 812 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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure:

Inhalation : Inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion : After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia.
Skin contact : Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis

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Eye contact : Repeated exposure may cause skin dryness or cracking.
May cause irritation.

Toxicological data :

Hazardous ingredient	CAS-nr.	method	
tetrafluoroethane	811-97-2	LC50 inhal.rat	567000 ppm
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	-	LD50 oral rat	> 5000 mg/kg
		LC50 inhal.rat	> 20 mg/l
		LD50 derm.rat	> 2000 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	
tetrafluoroethane	811-97-2	LC50 fish	450 mg/l
		EC50 daphnia	980 mg/l
Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic	-	IC50 algae	10-30 mg/l
		LC50 fish	> 10 mg/l
		EC50 daphnia	3 mg/l

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information 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 information available

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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.

National regulations : 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: 2.1
ADR/RID - Classification code: 5F

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.

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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: R11: Highly flammable.
R12: Extremely flammable.
R38: Irritating to skin.
R65: Harmful: may cause lung damage if swallowed.
R67: Vapours may cause drowsiness and dizziness.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*Explanation hazard statements: H220 : Extremely flammable gas.
H225 : Highly flammable liquid and vapour.
H280 : Contains gas under pressure; may explode if heated.
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H336 : May cause drowsiness or dizziness.
H411 : Toxic to aquatic life with long lasting effects.

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. Apart from any fair dealing for purposes of study, research and review of health, safety and environmental risks, no part of these documents may be reproduced by any process without written permission from CRC.