

**Productname :** FORMULA 20  
**Ref.Nr.:** BDS000508\_3\_20131121 (EN)  
**Creationdate :** 21.11.13 Version : 2.0  
**Replaces:** BDS000508\_20110921

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

FORMULA 20  
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**

<b>Physical:</b>	Aerosols, category 1 Extremely flammable aerosol. Pressurised container: May burst if heated.
<b>Health:</b>	Skin irritation, category 2 Causes skin irritation. Specific target organ toxicity - single exposure, category 3 May cause drowsiness or dizziness.
<b>Environment:</b>	Hazardous to the aquatic environment, chronic category 2 Toxic to aquatic life with long lasting effects.
<b>Other hazards :</b>	None

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

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EXTREMELY FLAMMABLE

Xi : IRRITANT

N : DANGEROUS FOR THE ENVIRONMENT

<b>Health:</b>	R38: Irritating to skin. R67: Vapours may cause drowsiness and dizziness.
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<b>Physical:</b>	EXTREMELY FLAMMABLE
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<b>Environment:</b>	R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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## 2.2. Label elements

### Labelling according to Regulation (EC) No 1272/2008

<b>Product identifier:</b>	Contains: hydrocarbons
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<b>Hazard pictogram(s):</b>	 
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<b>Signal word:</b>	Danger
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<b>Hazard statement(s):</b>	H222 : Extremely flammable aerosol. H229 : Pressurised container: May burst if heated. H315 : Causes skin irritation. H336 : May cause drowsiness or dizziness. H411 : Toxic to aquatic life with long lasting effects.
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<b>Precautionary statement(s):</b>	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. P261 : Avoid breathing dust/fume/gas/mist/vapours/spray. P271 : Use only outdoors or in a well-ventilated area. 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.
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<b>Supplemental Hazard information:</b>	None
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## 2.3. Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable.

### 3.2. Mixtures

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Hazardous ingredient	CAS-nr.	EC-nr	w/w %	symbol	R-phrases*	Notes
pentane	109-66-0	203-692-4	30-60	F+,Xn,N	12-51/53-65-66-67	A
Naphtha (petroleum), hydrotreated light	64742-49-0	931-254-9	30-60	F,Xn,N	11-38-51/53-65-67	B,P
tetrafluoroethane	811-97-2	212-377-0	10-30	-	-	B
carbon dioxide	124-38-9	204-696-9	1-5	-	-	A,G

**Explanation notes**

A : substance with Community workplace exposure limit

B : substance with national established workplace exposure limit

G : exempted from the obligation to register in accordance with art.2(7)(a)of REACH Regulation No 1907/2006

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
pentane	01-2119459286-30	109-66-0	203-692-4	30-60	Flam. Liq. 2, Asp. Tox. 1, STOT SE 3, Aquatic Chronic 2	H225,H304,H336,H411	A
Naphtha (petroleum), hydrotreated light	01-2119484651-34	64742-49-0	931-254-9	30-60	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2	H225,H315,H336,H304,H411	B,P
carbon dioxide		124-38-9	204-696-9	1-5	Press. Gas	H280	A,G

**Explanation notes**

A : substance with Community workplace exposure limit

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G : exempted from the obligation to register in accordance with art.2(7)(a)of REACH Regulation No 1907/2006

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**

<b>Contact with eyes :</b>	If substance has got into eyes, immediately wash out with plenty of water If eye irritation persists: Get medical advice/attention.
<b>Contact with skin :</b>	Take off contaminated clothing and wash before reuse. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
<b>Inhalation :</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Ingestion :</b>	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**

<b>Inhalation :</b>	Excessive inhalation of solvent vapours may give rise to nausea, headaches and dizziness
<b>Ingestion :</b>	After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia. Symptoms : sore throat, abdominal pain, nausea, vomiting
<b>Skin contact :</b>	Irritating to skin Symptoms : redness and pain

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**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

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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,CO<sub>2</sub>

#### 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

#### 6.4. Reference to other sections

For further information see section 8

### SECTION 7: Handling and storage

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### 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

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	
<b>EU established exposure limits:</b>			
pentane	109-66-0	TWA	1000 ppm
carbon dioxide	124-38-9	TWA	5000 ppm
<b>National established exposure limits, United Kingdom</b>			
pentane	109-66-0	TWA	600 ppm
carbon dioxide	124-38-9	TWA	5000 ppm
		STEL	15000 ppm
tetrafluoroethane	811-97-2	TWA	1000 ppm

### 8.2. Exposure controls

<b>Control procedures :</b>	Ensure adequate ventilation Keep away from heat and sources of ignition Take precautionary measures against static discharges
<b>Personal protection :</b>	Take precautions to avoid contact with skin and eyes when handling the product. Ensure adequate ventilation
<b>inhalation :</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Air purifying respirator equipped with organic gas/vapor cartridge (type A or AX)

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<b>hands and skin :</b>	Wear suitable protective gloves against chemicals (nitrile)
<b>eyes :</b>	Wear safety goggles.
<b>Environmental protection:</b>	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)

<b>Apperance : physical state :</b>	Liquid under pressure.
<b>colour :</b>	Colorless.
<b>odour :</b>	Solvent.
<b>pH :</b>	Not applicable.
<b>Boiling point/range :</b>	40-65 °C
<b>Flash point :</b>	< 0 °C
<b>Evaporation rate :</b>	Not available.
<b>Explosion limits : upper limit :</b>	Not available.
<b>lower limit :</b>	Not available.
<b>Vapour pressure :</b>	Not available.
<b>Relative density :</b>	0.675 g/cm <sup>3</sup> (@ 20°C).
<b>Solubility in water :</b>	Insoluble in water
<b>Auto-ignition :</b>	> 200 °C
<b>Viscosity :</b>	Not available.

### 9.2. Other information

<b>VOC:</b>	blank
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## 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

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### 10.5. Incompatible materials

Strong oxidising agent

### 10.6. Hazardous decomposition products

CO,CO2

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Inhalation :</b>	Inhalation of solvent vapours may give rise to nausea, headaches and dizziness
<b>Ingestion :</b>	After vomiting of swallowed product aspiration into lungs is likely. Solvents may induce chemical pneumonia.
<b>Skin contact :</b>	Irritating to skin
<b>Eye contact :</b>	May cause irritation.

#### Toxicological data :

Hazardous ingredient	CAS-nr.	method	
pentane	109-66-0	LD50 oral rat	> 5000 mg/kg
		LD50 derm.rabit	> 3000 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 2  
Toxic to aquatic life with long lasting effects.

#### Ecotoxicological data:

Hazardous ingredient	CAS-nr.	method	
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

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### 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

## 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 (naphta, pentane)

### 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: Yes  
IMDG - Marine pollutant: Marine pollutant  
IATA/ICAO - Environmentally hazardous: Yes



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hazardous: .....

#### 14.6. Special precautions for user

ADR/RID - Tunnelcode:	(D)
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:	R11: Highly flammable. R12: Extremely 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. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
*Explanation hazard statements:	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.

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. 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.

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