

|                      |                           |                       |                        |
|----------------------|---------------------------|-----------------------|------------------------|
| <b>Productname :</b> | TF-90                     | <b>Creationdate :</b> | 29.06.17 Version : 1.1 |
| <b>Ref.Nr.:</b>      | UDS000737_3_20170629 (EN) | <b>Replaces:</b>      | UDS000737_20160905     |

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

TF-90  
Aerosol

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

Cleaners - Heavy duty

**1.3. Details of the supplier of the safety data sheet**

CRC Industries UK Ltd.  
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 (office hours)

**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<br>Extremely flammable aerosol.<br>Pressurised container: May burst if heated.                                                                                                                          |
| Classification is based on test data.       |                                                                                                                                                                                                                              |
| <b>Health:</b>                              | Skin irritation, category 2<br>Causes skin irritation.<br>Eye irritation, category 2<br>Causes serious eye irritation.<br>Specific target organ toxicity - single exposure, category 3<br>May cause drowsiness or dizziness. |
| Classification based on calculation method. |                                                                                                                                                                                                                              |
| <b>Environment:</b>                         | Hazardous to the aquatic environment, chronic category 2<br>Toxic to aquatic life with long lasting effects.                                                                                                                 |



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Classification based on calculation method.

## 2.2. Label elements

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

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product identifier:</b>         | Contains:<br>Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic propan-2-ol; isopropyl alcohol ;isopropanol                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Hazard pictogram(s):</b>        |                                                                                                                                                                                                                                                                                                                |
| <b>Signal word:</b>                | Danger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Hazard statement(s):</b>        | H222 : Extremely flammable aerosol.<br>H229 : Pressurised container: May burst if heated.<br>H315 : Causes skin irritation.<br>H319 : Causes serious eye irritation.<br>H336 : May cause drowsiness or dizziness.<br>H411 : Toxic to aquatic life with long lasting effects.                                                                                                                                                                                                                                                                                        |
| <b>Precautionary statement(s):</b> | P102 : Keep out of reach of children.<br>P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P211 : Do not spray on an open flame or other ignition source.<br>P251 : Do not pierce or burn, even after use.<br>P261 : Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P271 : Use only outdoors or in a well-ventilated area.<br>P410/412 : Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.<br>P501-2 : Dispose of contents/container to an authorised waste collection point. |

## 2.3. Other hazards

No information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable.

### 3.2. Mixtures

| Hazardous ingredient                                                              | Registration number | CAS-nr.    | EC-nr       | w/w % | Hazard Class and Category                           | Hazard statement             | Notes |
|-----------------------------------------------------------------------------------|---------------------|------------|-------------|-------|-----------------------------------------------------|------------------------------|-------|
| Hydrocarbons, C3-4-rich, petroleum distillate Petroleumgas (1,3-butadiene < 0.1%) | 01-2119485926-20    | 68512-91-4 | 270-990-9   | 30-60 | Press. Gas, Flam. Gas 1                             | H280, H220                   | K, G  |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclic                                   | 01-2119475515-      | -          | (927-510-4) | 30-60 | Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1 | H225, H315, H336, H304, H411 | Q     |



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|                                                |                          |         |               |           |                                          |                |   |
|------------------------------------------------|--------------------------|---------|---------------|-----------|------------------------------------------|----------------|---|
|                                                | 33                       |         |               |           | Aquatic Chronic 2                        |                |   |
| propan-2-ol; isopropyl alcohol<br>;isopropanol | 01-<br>2119457558-<br>25 | 67-63-0 | 200-<br>661-7 | 10-<br>20 | Flam. Liq. 2, Eye Irrit. 2,<br>STOT SE 3 | H225,H319,H336 | B |

**Explanation notes**

B : substance with national established workplace exposure limit

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

K : not classified as carcinogen, less than 0.1% w/w 1,3-butadiene (Einecs-nr. 203-450-8)

Q : The CAS-no is only an indicative identifier to be used outside the EU for global inventory entries.

(\* Explanation phrases : see chapter 16)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                            |                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contact with eyes :</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists: Get medical advice/attention. |
| <b>Contact with skin :</b> | Take off contaminated clothing and wash before reuse.<br>IF ON SKIN: Wash with plenty of soap and water.<br>If skin irritation occurs: Get medical advice/attention.                          |
| <b>Inhalation :</b>        | IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>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.<br>Symptoms : sore throat, abdominal pain, nausea, vomiting |
| <b>Skin contact :</b> | Irritating to skin<br>Symptoms : redness and pain                                                                                                                        |
| <b>Eye contact :</b>  | Irritating to eyes<br>Symptoms : redness and pain, impaired vision                                                                                                       |

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

|                         |                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>General Advice :</b> | If you feel unwell, seek medical advice (show the label where possible)<br>If symptoms persist always call a doctor |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

foam, carbon dioxide or dry agent  
 Do not use water jet extinguishing media, due to the risk of spreading fire.



|                      |                           |                       |                        |
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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  
Place in appropriate container  
This material and/or its container must be disposed of as hazardous waste.

## 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.



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Eyewash bottles should be available

## 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)

Cleaners - Heavy duty

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### Exposure limits :

| Hazardous ingredient                                 | CAS-nr. | method |         |
|------------------------------------------------------|---------|--------|---------|
| EU established exposure limits:                      |         |        |         |
| propan-2-ol; isopropyl alcohol ;isopropanol          | 67-63-0 | TWA    | 400 ppm |
|                                                      |         | STEL   | 500 ppm |
| National established exposure limits, United Kingdom |         |        |         |
| propan-2-ol; isopropyl alcohol ;isopropanol          | 67-63-0 | TWA    | 400 ppm |
|                                                      |         | STEL   | 500 ppm |

## 8.2. Exposure controls

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Control procedures :</b>      | Ensure adequate ventilation<br>Keep away from heat and sources of ignition<br>Take precautionary measures against static discharges                                                                                                                                                                                                                                                               |
| <b>Personal protection :</b>     | Take precautions to avoid contact with skin and eyes when handling the product.<br>Ensure adequate ventilation<br>In all cases handle and use the product in accordance with good industrial hygiene practices.                                                                                                                                                                                   |
| <b>inhalation :</b>              | In case of insufficient ventilation, wear suitable respiratory equipment.                                                                                                                                                                                                                                                                                                                         |
| <b>hands and skin :</b>          | When handling the product wear chemical-resistant gloves (standard EN 374).                                                                                                                                                                                                                                                                                                                       |
| <b>Recommended gloves:</b>       | Nitrile<br>The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through.<br>Depending on amount and duration of use and the risk of contact with the product the gloves manufacturer can assist you in the selection of the right glove material and breakthrough time. |
| <b>eyes :</b>                    | Wear safety eyewear according to EN 166.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Environmental protection:</b> | Avoid release to the environment.<br>Collect spillage.                                                                                                                                                                                                                                                                                                                                            |



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## 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>     | Propane/butane propelled liquid. |
| <b>colour :</b>                         | Colorless.                       |
| <b>odour :</b>                          | Characteristic odor.             |
| <b>pH :</b>                             | Not applicable.                  |
| <b>Boiling point/range :</b>            | Not available.                   |
| <b>Flash point :</b>                    | Not available.                   |
| <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>               | 0.725 g/cm3.                     |
| <b>Solubility in water :</b>            | Insoluble in water               |
| <b>Auto-ignition :</b>                  | Not available.                   |
| <b>Viscosity :</b>                      | Not available.                   |

### 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

Avoid overheating

### 10.5. Incompatible materials

Strong oxidising agent

### 10.6. Hazardous decomposition products

CO,CO2



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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                           |                                                                 |
|-------------------------------------------|-----------------------------------------------------------------|
| <b>acute toxicity:</b>                    | based on available data the classification criteria are not met |
| <b>skin corrosion/irritation:</b>         | Causes skin irritation.                                         |
| <b>serious eye damage/irritation:</b>     | Causes serious eye irritation.                                  |
| <b>respiratory or skin sensitisation:</b> | based on available data the classification criteria are not met |
| <b>germ cell mutagenicity:</b>            | based on available data the classification criteria are not met |
| <b>carcinogenicity:</b>                   | based on available data the classification criteria are not met |
| <b>toxicity for reproduction:</b>         | based on available data the classification criteria are not met |
| <b>STOT-single exposure:</b>              | May cause drowsiness or dizziness.                              |
| <b>STOT repeated exposure:</b>            | based on available data the classification criteria are not met |
| <b>aspiration hazard:</b>                 | based on available data the classification criteria are not met |

### Information on likely routes of exposure:

|                       |                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|
| <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>  | Irritating to eyes                                                                                           |

### Toxicological data :

| Hazardous ingredient                           | CAS-nr. | method          |              |
|------------------------------------------------|---------|-----------------|--------------|
| propan-2-ol; isopropyl alcohol ;isopropanol    | 67-63-0 | LD50 oral rat   | 5840 mg/kg   |
|                                                |         | LC50 inhal.rat  | > 25000 mg/l |
|                                                |         | LD50 derm.rabit | 13900 mg/kg  |
| Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic | -       | LD50 oral rat   | > 5840 mg/kg |
|                                                |         | LC50 inhal.rat  | 23.3 mg/l    |
|                                                |         | LD50 derm.rat   | > 2920 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:



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| Hazardous ingredient                           | CAS-nr. | method       |             |
|------------------------------------------------|---------|--------------|-------------|
| propan-2-ol; isopropyl alcohol ;isopropanol    | 67-63-0 | IC50 algae   | 1000 mg/l   |
|                                                |         | LC50 fish    | 9640 mg/l   |
|                                                |         | EC50 daphnia | 9714 mg/l   |
| Hydrocarbons, C7, n-alkanes,isoalkanes, cyclic | -       | IC50 algae   | 10-30 mg/l  |
|                                                |         | LC50 fish    | > 13.4 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

# 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 (hydrocarbons)



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#### 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

#### 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 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: 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.



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## acronyms and synonyms:

H319 : Causes serious eye irritation.  
H336 : May cause drowsiness or dizziness.  
H411 : Toxic to aquatic life with long lasting effects.  
TWA = time weight average  
STEL = short time exposure limit  
VOC = volatile organic compounds  
PBT = persistant bioaccumulative toxic  
vPvB = very persitant very bioaccumulative

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.

