

**Productname :** VERTICAL MARKER  
**Ref.Nr.:** BDS000011\_3\_20120328

**Creationdate :** 28.03.12 Version : 1.1  
**Replaces:** BDS000011\_20120206

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

### 1.1. Product identifier

**VERTICAL MARKER**  
**Fluo Red, Fluo Green, Fluo Yellow, Fluo Blue, White, Orange Fluo, Fuchsia Fluo**  
 Aerosol

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

Paints

### 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, B.P. 90028, 95102 Argenteuil Cedex                 | 01.34.11.20.00    | 01.34.11.09.96   |
| CRC Industries Deutschland GmbH | Südtring 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 67/548/EEC or 1999/45/EC:

**Health:** R66: Repeated exposure may cause skin dryness or cracking.  
 R67: Vapours may cause drowsiness and dizziness.  
**Physical:** EXTREMELY FLAMMABLE



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**Environment:** Not classified

## 2.2. Label elements

**Warning symbol(s) :** EXTREMELY FLAMMABLE



**Risk-phrase(s) :** R66: Repeated exposure may cause skin dryness or cracking.  
 R67: Vapours may cause drowsiness and dizziness.

**Safety-phrase(s) :** S2: Keep out of the reach of children.  
 S16: Keep away from sources of ignition - No smoking.  
 S23: Do not breathe vapours/spray.  
 S51: Use only in well-ventilated areas.

**Extra label elements according to Aerosol Dispenser Directive 75/324/EC:** Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.

Without adequate ventilation formation of explosive mixtures may be possible.  
**Other extra label elements:** Remark: Preparations classified as harmful on the basis of an aspiration hazard need not be labelled as harmful with R65 when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment. (EU-Directive 67/548 Annex VI 9.4)

## 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 |
|--|----------|-----------|-------|--------|-------------|-------|
| dimethyl ether   | 115-10-6 | 204-065-8 | 25-50 | F+     | 12          | A     |
| n-butyl acetate  | 123-86-4 | 204-658-1 | 10-25 |        | 10-66-67    |       |
| ethyl acetate  | 141-78-6 | 205-500-4 | 5-10  | F,Xi   | 11-36-66-67 | B     |
| <b>Explanation notes</b>   |          |           |       |        |             |       |
| A : substance with Community workplace exposure limit            |          |           |       |        |             |       |
| B : substance with national established workplace exposure limit |          |           |       |        |             |       |

| Hazardous ingredient     | Registration number | CAS-nr.  | EC-nr     | w/w % | Hazard Class and Category             | Hazard statement | Notes |
|--------------------------|---------------------|----------|-----------|-------|---------------------------------------|------------------|-------|
| dimethyl ether           |                     | 115-10-6 | 204-065-8 | 25-50 | Flam. Gas 1, Press. Gas               | H220             | A     |
| n-butyl acetate          | 01-2119485493-29    | 123-86-4 | 204-658-1 | 10-25 | Flam. Liq. 3, STOT SE 3               | H226,H336        |       |
| ethyl acetate            |                     | 141-78-6 | 205-500-4 | 5-10  | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3 | H225,H319,H336   | B     |
| <b>Explanation notes</b> |                     |          |           |       |                                       |                  |       |



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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

|                            |  |
|----------------------------|--|
| <b>Contact with eyes :</b> | If substance has got into eyes, immediately wash out with plenty of water<br>Seek medical attention if irritation persists                         |
| <b>Contact with skin :</b> | Wash with water and soap.<br>Seek medical attention if irritation persists   |
| <b>Inhalation :</b>        | Fresh air, keep warm and at rest.<br>Seek medical attention if ill effects occur   |
| <b>Ingestion :</b>         | If swallowed do not induce vomiting because of risk of aspiration into the lungs.<br>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> | May cause irritation.<br>Symptoms : redness and pain   |
| <b>Eye contact :</b>  | May cause irritation.<br>Symptoms : redness and pain   |

### 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

### 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



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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

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)

Paints

## SECTION 8: Exposure controls/personal protection



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## 8.1. Control parameters

### Exposure limits :

| Hazardous ingredient  | CAS-nr.  | method |          |
|---|----------|--------|----------|
| <b>EU established exposure limits:</b>                      |          |        |          |
| dimethyl ether  | 115-10-6 | TWA    | 1000 ppm |
| <b>National established exposure limits, United Kingdom</b> |          |        |          |
| dimethyl ether  | 115-10-6 | TWA    | 400 ppm  |
|   |          | STEL   | 500 ppm  |
| n-butyl acetate   | 123-86-4 | TWA    | 150 ppm  |
|   |          | STEL   | 200 ppm  |
| ethyl acetate   | 141-78-6 | TWA    | 200 ppm  |
|   |          | STEL   | 400 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                      |
| <b>inhalation :</b>          | In case of insufficient ventilation, wear suitable respiratory equipment.   |
| <b>hands and skin :</b>      | Wear suitable protective gloves against chemicals<br>(butyl rubber)   |
| <b>eyes :</b>                | Wear safety goggles.  |

## 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>     | DME propelled liquid.         |
| <b>colour :</b>                         | See color cap.                |
| <b>odour :</b>                          | Characteristic odor.          |
| <b>pH :</b>                             | Not applicable.               |
| <b>Boiling point/range :</b>            | Not available.                |
| <b>Flash point :</b>                    | - 41 °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>               | 1 g/cm <sup>3</sup> (@ 20°C). |
| <b>Auto-ignition :</b>                  | > 200 °C                      |
| <b>Viscosity :</b>                      | Not applicable.               |



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## 9.2. Other information

**VOC:** 731 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

**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  
Repeated exposure may cause skin dryness or cracking.

**Eye contact :** May cause irritation.

### Toxicological data :

| Hazardous ingredient | CAS-nr.  | method        |              |
|----------------------|----------|---------------|--------------|
| n-butyl acetate      | 123-86-4 | LD50 oral rat | > 2000 mg/kg |



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LC50 inhal.rat > 20 mg/l

## SECTION 12: Ecological information

### 12.1. Toxicity

Not classified

### Ecotoxicological data:

| Hazardous ingredient | CAS-nr.  | method       |          |
|----------------------|----------|--------------|----------|
| n-butyl acetate      | 123-86-4 | IC50 algae   | 647 mg/l |
|                      |          | LC50 fish    | 18 mg/l  |
|                      |          | EC50 daphnia | 44 mg/l  |

### 12.2. Persistence and degradability

No experimental data available

### 12.3. Bioaccumulative potential

No experimental data available

### 12.4. Mobility in soil

No experimental data available

### 12.5. Results of PBT and vPvB assessment

No information available

### 12.6. Other adverse effects

Do not allow to enter public sewers and watercourses

## 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



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#### 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: (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



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## SECTION 16: Other information

\*Explanation risk-phrases: R10: Flammable.  
R11: Highly flammable.  
R12: Extremely flammable.  
R36: Irritating to eyes.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.

\*Explanation hazard statements: H220 : Extremely flammable gas.  
H225 : Highly flammable liquid and vapour.  
H226 : Flammable liquid and vapour.  
H319 : Causes serious eye irritation.  
H336 : May cause drowsiness or dizziness.

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.