

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 5 (replaces version 4)

Revision: 31.05.2022

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

##### 1.1 Product identifier

**Trade name:** UNIVERSAL Marker Forestry Marking Paint – Long Lasting

**Article number:** 630701001+, 630702021+, 630703321+, 630703021+, 630704021+, 630705021+, 630706021+, 630709001+, 630708021+ / 10745, 10746, 10753, 10748, 10755, 10756, 10758, 10761, 10760

**UFI :** DSP5-M0VE-T005-5WUQ

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

No further relevant information available.

##### 1.3 Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

##### 1.4 Product category PC9a Coatings and paints, thinners, paint removers

##### 1.5 Process category

PROC7 Industrial spraying

PROC11 Non industrial spraying

##### 1.6 Application of the substance / the mixture Lacquer

##### 1.7 Details of the supplier of the safety data sheet

##### 1.8 Manufacturer/Supplier:

A.M.P.E.R.E. SYSTEM

3 rue Antoine Balard

Z.I. du Vert Galant

95310 Saint-Ouen-l'Aumône FRANCE

Téléphone: + 33 1 34 64 72 72 Fax: +33 1 30 37 55 17 [fds@amperesystem.com](mailto:fds@amperesystem.com)

##### 1.9 Further information obtainable from: Customer Service

##### 1.10 Emergency telephone number: UK : National Poisons Information Service - 0344 892 0111

Ireland : National Poisons Information Centre - Beaumont Hospital - PO Box 1297 Beaumont Road 9

Dublin : +353 1 809 2566 (Healthcare professionals-24/7) - +353 1 809 2166 (public, 8am - 10pm, 7/7)

#### SECTION 2: Hazards identification

##### 2.1 Classification of the substance or mixture

##### 2.2 Classification according to Regulation (EC) No 1272/2008



flame

Aerosol 1

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Skin Irrit. 2

H315

Causes skin irritation.

Eye Irrit. 2

H319

Causes serious eye irritation.

STOT SE 3

H336

May cause drowsiness or dizziness.

Aquatic Chronic 3

H412

Harmful to aquatic life with long lasting effects.

##### 2.3 Label elements

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

The product is classified and labelled according to the GB CLP regulation.

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**· Hazard pictograms**

GHS02 GHS07

**· Signal word Danger****· Hazard-determining components of labelling:**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane ethyl acetate

2-methoxy-1-methylethyl acetate

n-butyl acetate

**· Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

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.

P260 Do not breathe spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.

**· Additional information:**

Buildup of explosive mixtures possible without sufficient ventilation.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

|                                                                                               |                                                                                                                                                                                 |           |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| EC number: 921-024-6<br>Reg.nr.: 01-2119475514-35                                             | Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane<br>Flam. Liq. 2, H225<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>Skin Irrit. 2, H315; STOT SE 3, H336 | 20-<25%   |
| CAS: 74-98-6<br>EINECS: 200-827-9<br>Index number: 601-003-00-5<br>Reg.nr.: 01-2119486944-21  | propane<br>Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280                                                                                                                       | 20-<25%   |
| CAS: 106-97-8<br>EINECS: 203-448-7<br>Index number: 601-004-00-0<br>Reg.nr.: 01-2119474691-32 | butane (containing < 0,1 % butadiene (203-450-8))<br>Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280                                                                             | 12.5-<20% |

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|                                                                                                 |                                                                                                          |           |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------|
| CAS: 141-78-6<br>EINECS: 205-500-4<br>Index number: 607-022-00-5<br>Reg.nr.: 01-2119475103-46   | ethyl acetate<br>⚠ Flam. Liq. 2, H225<br>⚠ Eye Irrit. 2, H319; STOT SE 3, H336<br>EUH066                 | 10-<12,5% |
| CAS: 75-28-5<br>EINECS: 200-857-2<br>Index number: 601-004-00-0<br>Reg.nr.: 01-2119485395-27    | isobutane (containing < 0,1 % butadiene (203-450-8))<br>⚠ Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280 | 5-<10%    |
| CAS: 108-65-6<br>EINECS: 203-603-9<br>Index number: 607-195-00-7<br>Reg.nr.: 01-2119475791-29   | 2-methoxy-1-methylethyl acetate<br>⚠ Flam. Liq. 3, H226<br>⚠ STOT SE 3, H336                             | 2,5-<5%   |
| CAS: 13463-67-7<br>EINECS: 236-675-5<br>Index number: 022-006-00-2<br>Reg.nr.: 01-2119489379-17 | titanium dioxide<br>⚠ Carc. 2, H351                                                                      | 2,5-<5%   |
| CAS: 123-86-4<br>EINECS: 204-658-1<br>Index number: 607-025-00-1<br>Reg.nr.: 01-2119485493-29   | n-butyl acetate<br>⚠ Flam. Liq. 3, H226<br>⚠ STOT SE 3, H336<br>EUH066                                   | <2,5%     |

**Additional information:**

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply.  
For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**4.1 Description of first aid measures**

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

**5.1 Extinguishing media****Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.

**5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**5.3 Advice for firefighters -**

- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

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- **6.2 Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 2 B
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

#### · **Ingredients with limit values that require monitoring at the workplace:**

##### **106-97-8 butane (containing < 0,1 % butadiene (203-450-8))**

WEL Short-term value: 1810 mg/m<sup>3</sup>, 750 ppm  
Long-term value: 1450 mg/m<sup>3</sup>, 600 ppm  
Carc (if more than 0.1% of buta-1.3-diene)

##### **141-78-6 ethyl acetate**

WEL Short-term value: 1468 mg/m<sup>3</sup>, 400 ppm  
Long-term value: 734 mg/m<sup>3</sup>, 200 ppm

##### **108-65-6 2-methoxy-1-methylethyl acetate**

WEL Short-term value: 548 mg/m<sup>3</sup>, 100 ppm  
Long-term value: 274 mg/m<sup>3</sup>, 50 ppm  
Sk

##### **13463-67-7 titanium dioxide**

WEL Long-term value: 10\* 4\*\* mg/m<sup>3</sup>  
\*total inhalable \*\*respirable

##### **123-86-4 n-butyl acetate**

WEL Short-term value: 966 mg/m<sup>3</sup>, 200 ppm  
Long-term value: 724 mg/m<sup>3</sup>, 150 ppm

#### · **DNELs**

##### **Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

|        |      |                                                   |
|--------|------|---------------------------------------------------|
| Oral   | DNEL | 1301 mg/kg /per day (Consumer, longterm systemic) |
| Dermal | DNEL | 13964 mg/kg /per day (Worker, longterm systemic)  |
|        | DNEL | 1377 mg/kg /per day (Consumer, longterm systemic) |

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|                                                 |      |                                                              |
|-------------------------------------------------|------|--------------------------------------------------------------|
| Inhalative                                      | DNEL | 5306 mg/m <sup>3</sup> (Worker, longterm systemic)           |
|                                                 | DNEL | 1131 mg/m <sup>3</sup> (Consumer, longterm systemic)         |
| <b>141-78-6 ethyl acetate</b>                   |      |                                                              |
| Oral                                            | DNEL | 4.5 mg/kg /per day (Consumer, longterm systemic)             |
| Dermal                                          | DNEL | 63 mg/kg /per day (Worker, longterm systemic)                |
|                                                 | DNEL | 37 mg/kg /per day (Consumer, longterm systemic)              |
| Inhalative                                      | DNEL | 734 mg/m <sup>3</sup> /200 ppm (Worker, longterm systemic)   |
|                                                 | DNEL | 1468 mg/m <sup>3</sup> /400 ppm (Worker, acute systemic)     |
|                                                 | DNEL | 734 mg/m <sup>3</sup> /200 ppm (Worker, longterm local)      |
|                                                 | DNEL | 1468 mg/m <sup>3</sup> /400 ppm (Worker, acute local)        |
|                                                 | DNEL | 367 mg/m <sup>3</sup> /100 ppm (Consumer, longterm systemic) |
|                                                 | DNEL | 734 mg/m <sup>3</sup> /200 ppm (Consumer; acute systemic)    |
|                                                 | DNEL | 367 mg/m <sup>3</sup> /100 ppm (Consumer, longterm local)    |
|                                                 | DNEL | 734 mg/m <sup>3</sup> /200 ppm (Consumer, acute local)       |
| <b>108-65-6 2-methoxy-1-methylethyl acetate</b> |      |                                                              |
| Dermal                                          | DNEL | 796 mg/kg /per day (Worker, longterm systemic)               |
|                                                 | DNEL | 320 mg/kg /per day (Consumer, longterm systemic)             |
| Inhalative                                      | DNEL | 275 mg/m <sup>3</sup> (Worker, longterm systemic)            |
|                                                 | DNEL | 33 mg/m <sup>3</sup> (Consumer, longterm systemic)           |
| <b>123-86-4 n-butyl acetate</b>                 |      |                                                              |
| Oral                                            | DNEL | 2 mg/kg /per day (Consumer, longterm systemic)               |
|                                                 | DNEL | 2 mg/kg /per day (Consumer, acute systemic)                  |
| Dermal                                          | DNEL | 11 mg/kg /per day (Worker, longterm systemic)                |
|                                                 | DNEL | 11 mg/kg /per day (Worker, acute systemic)                   |
|                                                 | DNEL | 6 mg/kg /per day (Consumer, longterm systemic)               |
| Inhalative                                      | DNEL | 6 mg/kg /per day (Consumer, acute systemic)                  |
|                                                 | DNEL | 300 mg/m <sup>3</sup> (Worker, longterm systemic)            |
|                                                 | DNEL | 600 mg/m <sup>3</sup> (Worker, acute systemic)               |
|                                                 | DNEL | 300 mg/m <sup>3</sup> (Worker, longterm local)               |
|                                                 | DNEL | 600 mg/m <sup>3</sup> (Worker, acute local)                  |
|                                                 | DNEL | 35.7 mg/m <sup>3</sup> (Consumer, longterm systemic)         |
|                                                 | DNEL | 300 mg/m <sup>3</sup> (Consumer; acute systemic)             |
|                                                 | DNEL | 35.7 mg/m <sup>3</sup> (Consumer, longterm local)            |

**· PNECs****108-65-6 2-methoxy-1-methylethyl acetate**

|      |                                   |
|------|-----------------------------------|
| PNEC | 0.635 mg/l (Freshwater)           |
| PNEC | 0.064 mg/l (Seawater)             |
| PNEC | 100 mg/l (Sewage treatment plant) |
| PNEC | 3.29 mg/kg (Freshwater sediment)  |
| PNEC | 0.329 mg/kg (Seawater sediment)   |
| PNEC | 0.29 mg/kg (Soil)                 |

**123-86-4 n-butyl acetate**

|      |                                    |
|------|------------------------------------|
| PNEC | 0.18 mg/l (Freshwater)             |
| PNEC | 0.018 mg/l (Seawater)              |
| PNEC | 0.36 mg/l (Sporadic release)       |
| PNEC | 35.6 mg/l (Sewage treatment plant) |

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PNEC 0.981 mg/kg (Freshwater sediment)

PNEC 0.0981 mg/kg (Seawater sediment)

PNEC 0.0903 mg/kg (Soil)

• **Additional information:** The lists valid during the making were used as basis.

• **8.2 Exposure controls**

• **Appropriate engineering controls** No further data; see item 7.

• **Individual protection measures, such as personal protective equipment**

• **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Avoid contact with the eyes.

• **Respiratory protection:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A2/P3

• **Hand protection**



Protective gloves

• **Material of gloves**

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• **Penetration time of glove material**

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min

Butyl acetate: 60 min

Ethyl acetate: 170 min

Xylene: 42 min

Butyl rubber gloves with a thickness of 0.4 mm are solvent resistant for 42- 480 minutes. As protective measure, we recommend that users and responsible persons for work safety assume solvent resistance length of 42 minutes. Considering the data in section 3 of this SDS, one can assume longer resistance length in particular cases.

• **Eye/face protection**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **General Information**

• **Physical state**

Aerosol

• **Colour:**

According to product specification

• **Odour:**

Characteristic

• **Odour threshold:**

Not determined.

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|                                                                   |                                                                                       |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| · <b>Melting point/freezing point:</b>                            | Undetermined.                                                                         |
| · <b>Boiling point or initial boiling point and boiling range</b> | Not applicable, as aerosol.                                                           |
| · <b>Flammability</b>                                             | Not applicable.                                                                       |
| · <b>Lower and upper explosion limit</b>                          |                                                                                       |
| · <b>Lower:</b>                                                   | 1.5 Vol % (106-97-8 butane (containing < 0,1 % butadiene (203-450-8)))                |
| · <b>Upper:</b>                                                   | 11.5 Vol % (141-78-6 ethyl acetate)                                                   |
| · <b>Flash point:</b>                                             | Not applicable, as aerosol.                                                           |
| · <b>Ignition temperature:</b>                                    | 201 °C (393.8 °F) (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane) |
| · <b>Decomposition temperature:</b>                               | Not determined.                                                                       |
| · <b>pH</b>                                                       | Mixture is non-soluble (in water).                                                    |
| · <b>Viscosity:</b>                                               |                                                                                       |
| · <b>Kinematic viscosity</b>                                      | Not determined.                                                                       |
| · <b>Dynamic:</b>                                                 | Not determined.                                                                       |
| · <b>Solubility</b>                                               |                                                                                       |
| · <b>water:</b>                                                   | Not miscible or difficult to mix.                                                     |
| · <b>Partition coefficient n-octanol/water (log value)</b>        | Not determined.                                                                       |
| · <b>Vapour pressure at 20 °C (68 °F):</b>                        | 8300 hPa (6225.5 mm Hg) (74-98-6 propane)                                             |
| · <b>Density and/or relative density</b>                          |                                                                                       |
| · <b>Density at 20 °C (68 °F):</b>                                | 0.8 g/cm <sup>3</sup> (6.7 lbs/gal)                                                   |
| · <b>Relative density</b>                                         | Not determined.                                                                       |
| · <b>Vapour density</b>                                           | Not determined.                                                                       |

|                                                                                        |                 |
|----------------------------------------------------------------------------------------|-----------------|
| · <b>9.2 Other information</b>                                                         |                 |
| · <b>Appearance:</b>                                                                   |                 |
| · <b>Form:</b>                                                                         | Aerosol         |
| · <b>Important information on protection of health and environment, and on safety.</b> |                 |
| · <b>Explosive properties:</b>                                                         | Not determined. |
| · <b>Solvent content:</b>                                                              |                 |
| · <b>Organic solvents:</b>                                                             | 84.9 %          |
| · <b>VOC (EC)</b>                                                                      | ---             |
|                                                                                        | 679.4 g/l       |
| · <b>VOC-EU%</b>                                                                       | 84.92 %         |
| · <b>Solids content:</b>                                                               | 14.7 %          |
| · <b>Change in condition</b>                                                           |                 |
| · <b>Evaporation rate</b>                                                              | Not applicable. |

|                                                                                    |                                                                          |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| · <b>Information with regard to physical hazard classes</b>                        |                                                                          |
| · <b>Explosives</b>                                                                | Void                                                                     |
| · <b>Flammable gases</b>                                                           | Void                                                                     |
| · <b>Aerosols</b>                                                                  | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| · <b>Oxidising gases</b>                                                           | Void                                                                     |
| · <b>Gases under pressure</b>                                                      | Void                                                                     |
| · <b>Flammable liquids</b>                                                         | Void                                                                     |
| · <b>Flammable solids</b>                                                          | Void                                                                     |
| · <b>Self-reactive substances and mixtures</b>                                     | Void                                                                     |
| · <b>Pyrophoric liquids</b>                                                        | Void                                                                     |
| · <b>Pyrophoric solids</b>                                                         | Void                                                                     |
| · <b>Self-heating substances and mixtures</b>                                      | Void                                                                     |
| · <b>Substances and mixtures, which emit flammable gases in contact with water</b> | Void                                                                     |
| · <b>Oxidising liquids</b>                                                         | Void                                                                     |
| · <b>Oxidising solids</b>                                                          | Void                                                                     |
| · <b>Organic peroxides</b>                                                         | Void                                                                     |
| · <b>Corrosive to metals</b>                                                       | Void                                                                     |

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· **Desensitised explosives**

Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

|            |            |                   |
|------------|------------|-------------------|
| Oral       | LD50       | >5000 mg/kg (rat) |
| Dermal     | LD50       | >2000 mg/kg (rat) |
| Inhalative | LC50 / 4 h | >20 mg/m3 (rat)   |

**141-78-6 ethyl acetate**

|            |            |                    |
|------------|------------|--------------------|
| Oral       | LD50       | >18000 mg/kg (rat) |
| Dermal     | LD50       | 5620 mg/kg (rat)   |
| Inhalative | LC50 / 4 h | 1600 mg/m3 (rat)   |

**108-65-6 2-methoxy-1-methylethyl acetate**

|            |            |                      |
|------------|------------|----------------------|
| Oral       | LD50       | 8530 mg/kg (rat)     |
| Dermal     | LD50       | >5000 mg/kg (rabbit) |
| Inhalative | LC50 / 4 h | >10000 mg/m3 (rat)   |

**123-86-4 n-butyl acetate**

|            |            |                              |
|------------|------------|------------------------------|
| Oral       | LD50       | 10800 mg/kg (rat) (OECD 401) |
| Dermal     | LD50       | >17600 mg/kg (rabbit)        |
| Inhalative | LC50 / 4 h | >21 mg/m3 (rat)              |

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **STOT-single exposure** May cause drowsiness or dizziness.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

78-93-3 butanone

List II

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

|             |                                           |
|-------------|-------------------------------------------|
| EC50 / 48 h | 3 mg/l (daphnia magna / Wasserfloh)       |
| EC50 / 72 h | 30 mg/l (Pseudokirchneriella subcapitata) |

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LC50 / 96 h 11.4 mg/l (oncorhynchus mykiss / Regenbogenforelle)

**108-65-6 2-methoxy-1-methylethyl acetate**

EC50 / 48 h &gt;500 mg/l (daphnia magna)

LC50 / 96 h 100-180 mg/l (oncorhynchus mykiss / Regenbogenforelle)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into the ground.
- Harmful to aquatic organisms

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**
- Non contaminated packagings may be recycled.
- Dispose of packaging according to regulations on the disposal of packagings.

### SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 2.5F Gases.
- **Label** 2.1

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## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2022

Version number 5 (replaces version 4)

Revision: 31.05.2022

**Trade name: UNIVERSAL Marker Forestry Marking Paint – Long Lasting**

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· **IMDG, IATA**

- **Class** 2.1 Gases.
- **Label** 2.1

- **14.4 Packing group**
- **ADR, IMDG, IATA** not regulated

- **14.5 Environmental hazards:**
- **Marine pollutant:** No

- **14.6 Special precautions for user** Warning: Gases.
- **Hazard identification number (Kemler code):** -
- **EMS Number:** F-D,S-U
- **Stowage Code** SW1 Protected from sources of heat.  
SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.  
SG69 For AEROSOLS with a maximum capacity of 1 litre:  
Segregation as for class 9. Stow "separated from" class 1 except for division 1.4.  
For AEROSOLS with a capacity above 1 litre:  
Segregation as for the appropriate subdivision of class 2.  
For WASTE AEROSOLS:  
Segregation as for the appropriate subdivision of class 2.
- **Segregation Code**

- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

· **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity
- **Transport category** 2
- **Tunnel restriction code** D

- **IMDG**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity

- **UN "Model Regulation":** UN 1950 AEROSOLS, 2.1

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P3a** FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

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· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 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.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- H411 Toxic to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.

· **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (UK REACH)
- PNEC: Predicted No-Effect Concentration (UK REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Gas 1A: Flammable gases – Category 1A
- Aerosol 1: Aerosols – Category 1
- Press. Gas (Comp.): Gases under pressure – Compressed gas
- Flam. Liq. 2: Flammable liquids – Category 2
- Flam. Liq. 3: Flammable liquids – Category 3
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Carc. 2: Carcinogenicity – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· **\* Data compared to the previous version altered.**

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### DISCLAIMER

The information contained in this sheet comes from reliable sources. It has been drawn up based on our knowledge at the time of the most recent update, as indicated. This information is intended as an aid to the user and should not be considered as a guarantee.

Conditions or methods of handling, storage, use or disposal of the product are outside our control, and we may not be held responsible for any loss, damage or expenses incurred as a result of, or in connection with, the latter.

All substances or mixtures can present unknown dangers and must be used with caution. We cannot guarantee that all dangers have been set out in an exhaustive manner.

This sheet has been drawn up for, and must be used for, this product only. If the product is used as a component in another product, the information given with it may not be applicable.

This sheet does not under any circumstances exempt the user from complying with all laws, regulations and administrative requirements related to the product, health and safety, and the protection of human health and the environment.