

Trade name: Marking spray TopMarker red

Version: 1 / GB Date revised: 26.08.2021

Substance number: R-20124 Replaces Version: - / GB Print date: 26.08.2021

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

## 1.1. Product identifier

Marking spray TopMarker red

Registration no.

UFI ERQS-N1UT-R003-MGJN

Substance / product identification

PR-No. 20124, 20150, 20156

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

## Use of the substance/preparation

Paint for marking animals

**Identified Uses** 

SU1 Agriculture, forestry, fishery

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

## Address/Manufacturer

Albert Kerbl GmbH Felizenzell 9 84428 Buchbach

Telephone no. +49 8086 933-100 Fax no. +49 8086 933-500

Information provided Albert Kerbl GmbH Tel.: 0049-(0)8086-933-104 Email: bm@kerbl.com

by / telephone

E-mail address of info@kerbl.com

person responsible

for this SDS

## 1.4. Emergency telephone number

Joint poison information center for the states of Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia c/o HELIOS Klinikum Erfurt Nordhäuser Strasse 74

Tel.: (03 61) 73 07 30 - Fax: (03 61) 7 30 73 17

E-Mail: ggiz@ggiz-erfurt.de - Internet: www.ggiz-erfurt.de

For England (NHS 111) call: 111 For Scotland (NHS24) call: 111 For Wales (NHS Direct) call: 111 When it's less urgent than: 999

For Northern Irland call: GP Out-of-Hours (wwwgpoutofhours.hscni.net)

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification (Regulation (EC) No. 1272/2008)

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Aerosol 1 H222 H229

Eye Irrit. 2 H319

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008 For explanation of abbreviations see section 16.



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#### 2.2. Label elements

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

## **Hazard pictograms**





## Signal word

Danger

#### **Hazard statements**

H222 Extremely flammable aerosol.

H229 Pressurized container: may burst if heated.

H319 Causes serious eye irritation.

#### **Precautionary statements**

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. P403 Store in a well-ventilated place.

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

#### 2.3. Other hazards

Organic solvent vapours released by the product may cause drowsiness and dizziness. In high doses, the vapours cause headaches and symptoms of poisoning.

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

## **Hazardous ingredients**

Ethanol

CAS No. 64-17-5 EINECS no. 200-578-6

Registration no. 01-2119457610-43-XXXX

Concentration >= 59 %

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225 Eye Irrit. 2 H319

Propan-2-ol

CAS No. 67-63-0 EINECS no. 200-661-7

Concentration >= 11 < 20 %

Classification (Regulation (EC) No. 1272/2008)

Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336

## **Further ingredients**

Isobutane

CAS No. 75-28-5



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EINECS no. 200-857-2

Concentration >= 10 < 25 %

[3]

Classification (Regulation (EC) No. 1272/2008)

Flam. Gas 1 H220

Press. Gas

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C, U

DSD Directive 67/548/EEC, Annex I, Note C

**Propane** 

CAS No. 74-98-6 EINECS no. 200-827-9

Concentration >= 10 < 25 %

[3]

Classification (Regulation (EC) No. 1272/2008)

Flam. Gas 1 H220

Press. Gas

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note U

**Butane** 

CAS No. 106-97-8 EINECS no. 203-448-7

Concentration >= 10 < 25 %

[3]

Classification (Regulation (EC) No. 1272/2008)

Flam, Gas 1 H220

Press. Gas

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C, U

DSD Directive 67/548/EEC, Annex I, Note C

Note

[3] Substance with occupational exposure limits

#### Other information

Complete text of hazard statements in chapter 16

## **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### General information

In case of accident or if you feel unwell, seek medical advice immediately. Burn: Rinse thoroughly with water until pain stops. Remove clothing that does not stick to the skin and seek medical advice/transport to hospital. If possible, continue flushing until medical help arrives. If medical advice is needed, have the packaging or label ready.

## After inhalation

Ensure supply of fresh air. When vapours are intensively inhaled, seek medical help immediately.

#### After skin contact

Wash off immediately with soap and water. Take off contaminated clothing. Consult a doctor if skin irritation persists.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of irritation consult an oculist.



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## After ingestion

If swallowed, seek medical advice immediately and show this container or label. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

#### Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

## 4.2. Most important symptoms and effects, both acute and delayed

Irritant effects: The product contains substances which are locally irritating by skin/eye contact or inhalation. Contact with locally irritating substances may cause the contact area to be more sensitive to the absorption of harmful e.g. allergenic substances.

# 4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Dry powder, Foam, Carbon dioxide, Water mist

#### Non suitable extinguishing media

Full water jet

## 5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible. Flammable aerosol. CAUTION: Aerosol cans can explode. Do not breathe in smoke. In case of fire, the product decomposes and toxic gases such as COx are produced.

## 5.3. Advice for firefighters

#### Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus.

### Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

# **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Keep away sources of ignition. Take action to prevent static discharges. Use explosion-proof equipment/fittings and non-sparking tools. Avoid contact with skin, eyes and clothing. Use personal protective clothing.

#### 6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. In case the product spills into sewage waters, immediately inform the authorities.

## 6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Dispose of absorbed material in accordance with the regulations.

#### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.



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# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

## Advice on safe handling

Personal protective equipment: see chapter 8. Use outdoors if possible. Ensure adequate ventilation. Do not eat, drink or smoke when using.

## Advice on protection against fire and explosion

Container is under pressure. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Protect from frost. Keep away from sources of ignition - No smoking.

## 7.2. Conditions for safe storage, including any incompatibilities

#### Recommended storage temperature

Value >= 10 < 50 °C

## Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

## Storage classes

Storage class according to TRGS 510 2B Aerosol dispensers

#### Further information on storage conditions

Protect from heat and direct sunlight. Keep in a cool place, heat causes increase in pressure and risk of bursting.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

# **Biological limit values**

#### Propan-2-ol

List BGW (DE)
Value 25 mg/l

Parameter Acetone

Testing material Whole blood (B)

Test date End of exposure or end of shift.

Source TRGS 903

Propan-2-ol

List BGW (DE) Value 25 mg/l

Parameter Acetone
Testing material Urine (U)

Test date End of exposure or end of shift.

Source TRGS 903

#### Other information

Contains no substances with occupational exposure limit values.

#### **Derived No/Minimal Effect Levels (DNEL/DMEL)**

**Ethanol** 

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Long term

Route of exposure dermal

Mode of action Systemic effects

Concentration 206 mg/kg



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Type of value Derived No Effect Level (DNEL)

Reference group Professional
Duration of exposure Long term
Route of exposure inhalative
Mode of action Local effects
Concentration 1900

 $0 mg/m^3$ 

Type of value Derived No Effect Level (DNEL)

Reference group Professional
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 343 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group Professional
Duration of exposure Long term
Route of exposure inhalative
Mode of action Systemic effects

Concentration 950 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)

Reference group Consumer
Duration of exposure Long term
Route of exposure oral

Mode of action Systemic effects

Concentration 87 mg/kg

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Concentration

Consumer

Acute

inhalative

Local effects

Concentration 950 mg/m<sup>3</sup>

Type of value Derived No Effect Level (DNEL)

Reference group Consumer

Duration of exposure Long term

Route of exposure inhalative

Mode of action Systemic effects

Concentration 114 mg/m³

## **Predicted No Effect Concentration (PNEC)**

**Ethanol** 

Type of value PNEC Type Soil

Concentration 0,63 mg/kg

Type of value PNEC Saltwater

Concentration 0,79 mg/l

Type of value PNEC

Type Freshwater

Concentration 096 mg/l



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Type of value PNEC

Type Water (intermittent release)

Concentration 2,75 mg/l

#### 8.2. Exposure controls

## General protective and hygiene measures

Hold eye wash fountain available. Hold emergency shower available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

## **Respiratory protection**

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn.

#### **Hand protection**

Chemical resistant gloves

Appropriate Material nitrile

The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.

Hand protection must comply with EN 374.

## Eye protection

Safety glasses with side protection shield; Eye protection must comply with EN 166.

## **Body protection**

Clothing as usual in the chemical industry. Protective shoes

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Form Aerosol
Colour red
Odour Alcohol

Odour threshold

Remarks not determined

pH value

Remarks not determined

**Melting point** 

Remarks not determined

Freezing point

Remarks not determined

Initial boiling point and boiling range

Remarks not determined

Flash point

Value -60 °C

**Evaporation rate (ether = 1):** 

Remarks not determined

Flammability (solid, gas)

Flammable.

## Upper/lower flammability or explosive limits

Remarks not determined



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Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

**Density** 

Remarks not determined

Solubility in water

Remarks Not or little miscible.

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

Remarks Not applicable

**Decomposition temperature** 

Remarks Not relevant

**Viscosity** 

Remarks not determined

**Explosive properties** 

evaluation not determined

**Oxidising properties** 

Remarks not determined

#### 9.2. Other information

## Other information

None known

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Heating can cause fire or explosion.

#### 10.2. Chemical stability

No decomposition if used as directed.

## 10.3. Possibility of hazardous reactions

No dangerous reactions when stored and handled according to instructions.

## 10.4. Conditions to avoid

Sun exposure, high temperatures, ignition sources.

#### 10.5. Incompatible materials

Oxidising agents

## 10.6. Hazardous decomposition products

Irritant gases/vapours

## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Acute oral toxicity

ATE 28,7775 mg/kg



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Method calculated value (Regulation (EC) No. 1272/2008)

**Acute oral toxicity (Components)** 

**Ethanol** 

Species rat

LD50 1187 to 15010 mg/kg

Propan-2-ol

Species Rats (male/female)

LD50 5,84 mg/kg

**Acute dermal toxicity** 

ATE 82,4121 mg/kg
Method calculated value (Regulation (EC) No. 1272/2008)

**Acute dermal toxicity (Components)** 

**Ethanol** 

Species rabbit

LD50 17100 mg/kg

Propan-2-ol

Species rabbit

LD50 16,4 mg/kg

Acute inhalational toxicity

Remarks not determined

**Acute inhalative toxicity (Components)** 

**Ethanol** 

Species rat

LC50 115,9 to 133,8 mg/l

Duration of exposure 4 h

**Propane** 

Species mouse

LC50 1237 mg/l

**Butane** 

Species mouse

LC50 1237 mg/l

Propan-2-ol

Species Rats (male/female)

LC50 > 10000 ppm(V)

Duration of exposure 6 h

Skin corrosion/irritation

Remarks not determined

Serious eye damage/irritation

Remarks Eye contact with the product may lead to irritation.

Sensitization

Remarks not determined Subacute, subchronic, chronic toxicity

Remarks not determined

Mutagenicity

Remarks not determined

Reproductive toxicity

Remarks not determined

Carcinogenicity

Remarks not determined



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## **Specific Target Organ Toxicity (STOT)**

Remarks Prolonged or repeated inhalation of the vapours may cause damage to the

central nervous system.

#### **Experience** in practice

Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness. May cause mild irritation. Irritating to eyes. Produces burning and tearing sensation.

#### Other information

No toxicological data are available.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

## **General information**

not determined

#### Fish toxicity (Components)

**Ethanol** 

Species Fish

LC50 14,2 to 15,4 g/l

Duration of exposure 96 h

Propan-2-ol

Species Fish

LC50 10000 mg/l

Duration of exposure 96 h

### **Daphnia toxicity (Components)**

**Ethanol** 

Species Daphnia magna

EC50 12340 mg/l

Duration of exposure 48 h

Propan-2-ol

Species Daphnia pulex

LC50 > 10000 mg/l

Duration of exposure 24 h

## Algae toxicity (Components)

**Ethanol** 

Species Algae

EC50 275 mg/l

Duration of exposure 72 h

## 12.2. Persistence and degradability

## **General information**

not determined

#### **Biodegradability (Components)**

**Ethanol** 

Value 97 %
Duration of test 28 d

Method OECD Guideline 301 B

**Propane** 

Value 100 %

Duration of test 385,5 h

Method Biodegradation test, predates, OECD test

**Butane** 



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Value 100 %

Duration of test 385,5 h
Method Biodegradation test, predates, OECD test

Isobutane

Value 100 %

Duration of test 385,5 h

Method Biodegradation test, predates, OECD test

Propan-2-ol

Value 53 %
Duration of test 5 d

Method EU Method C.5

## 12.3. Bioaccumulative potential

#### **General information**

The product is not bioaccumulating.

#### Partition coefficient: n-octanol/water

Remarks not determined

## 12.4. Mobility in soil

#### **General information**

not determined

#### 12.5. Results of PBT and vPvB assessment

#### **General information**

Mixture does not meet PBT or vPvB criteria.

#### 12.6. Other adverse effects

#### **General information**

not determined

#### General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

## Disposal recommendations for the product

EWC waste code 16 05 04\* gases in pressure containers (including halons) containing dangerous substances

Must not be disposed of together with household waste.

Do not allow to enter drains.

In accordance with regulations for special waste, must be taken, after pretreatment, to an authorised special waste incineration plant.

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

Dispose of waste according to applicable legislation.

## Disposal recommendations for packaging

EWC waste code 16 05 04\* gases in pressure containers (including halons) containing

dangerous substances

Packaging that cannot be cleaned should be disposed off as product waste.

# **SECTION 14: Transport information**



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	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D		
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)	2	2.1	2.1
Label	8	8	8
Limited Quantity	11		
Transport category	2		
14.5. Environmental hazards	-	no	-

## Information for all modes of transport

14.6. Special precautions for user

See Sections 6 to 8

#### Other information

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

# **SECTION 15: Regulatory information**

#### 15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

# **SECTION 16: Other information**

## Hazard statements listed in Chapter 3

H225
 H319
 H336
 Highly flammable liquid and vapour.
 Causes serious eye irritation.
 May cause drowsiness or dizziness.

## **CLP categories listed in Chapter 3**

Eye Irrit. 2 Eye irritation, Category 2 Flam. Liq. 2 Flammable liquid, Category 2

STOT SE 3 Specific target organ toxicity - single exposure, Category 3

## Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.
Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.



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The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.