

Trade name: Marking spray TopMarker black

Version: 2 / GB

Date revised: 19.10.2022

Substance number: R-20177

Replaces Version: 1 / GB

Print date: 19.10.2022

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

### **1.1. Product identifier**

Marking spray TopMarker black

#### **Registration no.**

UFI AYUS-F1P8-R00C-173T

#### **Substance / product identification**

PR-No. 20177

### **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 by / telephone Albert Kerbl GmbH Tel.: 0049-(0)8086-933-104 Email: bm@kerbl.com

E-mail address of person responsible info@kerbl.com

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 Ireland call: GP Out-of-Hours (www.gpoutofhours.hscni.net)

## **SECTION 2: Hazards identification**

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

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

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

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 \*\*\*

##### Propan-2-ol

CAS No.	67-63-0				
EINECS no.	200-661-7				
Concentration	>= 10	<	20		%
Classification (Regulation (EC) No. 1272/2008)	Flam. Liq. 2		H225		
	Eye Irrit. 2		H319		
	STOT SE 3		H336		

#### Further ingredients

##### Ethanol

CAS No.	64-17-5				
EINECS no.	200-578-6				
Registration no.	01-2119457610-43-XXXX				
Concentration		>=	50		%
Advice: [3]					
Classification (Regulation (EC) No. 1272/2008)	Flam. Liq. 2		H225		

##### Butane

CAS No.	106-97-8
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EINECS no. 203-448-7  
 Concentration  $\geq$  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  $\geq$  1 < 10 %  
 [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

**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. Seek medical advice 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.

**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.

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### 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 CO<sub>x</sub> 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. Wear full protective suit.

#### 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. Do not discharge into the subsoil/soil. 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. Do not pick up with the help of saw-dust or other combustible substances. Containers in which spilt substance has been collected must be adequately labelled. Dispose of as prescribed.

### 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.

## 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

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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  $\geq$  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.

### Hints on storage assembly

Do not store with strong oxidizing agents.

### 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 (TRGS 903)
Value	25 mg/l
Parameter	Acetone
Testing material	Whole blood (B)
Test date	End of exposure or end of shift (b)
Source	TRGS 903

##### Propan-2-ol

List	BGW (TRGS 903)
Value	25 mg/l
Parameter	Acetone
Testing material	Urine (U)
Test date	End of exposure or end of shift (b)
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

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

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Concentration	1900	mg/m <sup>3</sup>
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	Consumer	
Duration of exposure	Acute	
Route of exposure	inhalative	
Mode of action	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/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

**Ethanol**

Type of value	PNEC	
Type	Soil	
Concentration	0,63	mg/kg
Type of value	PNEC	
Type	Saltwater	
Concentration	0,79	mg/l
Type of value	PNEC	
Type	Freshwater	
Concentration	096	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	2,75	mg/l

**8.2. Exposure controls**

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### General protective and hygiene measures

Do not smoke during work time. Hold eye wash fountain available. Hold emergency shower available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Do not eat or drink 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

<b>Physical state</b>	Aerosol
<b>Colour</b>	black
<b>Odour</b>	Alcohol
<b>Melting point</b>	
Remarks	not determined
<b>Freezing point</b>	
Remarks	not determined
<b>Boiling point or initial boiling point and boiling range</b>	
Remarks	not determined
<b>Flammability</b>	
Flammable.	
<b>Upper and lower explosive limits</b>	
Remarks	not determined
<b>Flash point</b>	
Value	-60 °C
<b>Ignition temperature</b>	
Remarks	Not applicable
<b>Decomposition temperature</b>	
Remarks	Not relevant
<b>pH value</b>	
Remarks	not determined
<b>Viscosity</b>	
Remarks	not determined
<b>Solubility(ies)</b>	
Remarks	not determined

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**Partition coefficient n-octanol/water (log value)**

Remarks not determined

**Vapour pressure**

Remarks not determined

**Density and/or relative density**

Remarks not determined

**Relative vapour density**

Remarks not determined

**9.2. Other information****Odour threshold**

Remarks not determined

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

Remarks not determined

**Solubility in water**

Remarks Not or little miscible.

**Explosive properties**

evaluation not determined

**Oxidising properties**

Remarks not determined

**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 hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

Remarks not determined

**Acute oral toxicity (Components)****Ethanol**

Species	rat				
LD50	11870	to	15010	mg/kg	

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**Propan-2-ol**

Species	Rats (male/female)	
LD50	5840	mg/kg

**Acute dermal toxicity**

Remarks not determined

**Acute dermal toxicity (Components)****Ethanol**

Species	rabbit	
LD50	17100	mg/kg

**Propan-2-ol**

Species	rabbit	
LD50	12800	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 Based on available data, the classification criteria are not met.

**Serious eye damage/irritation**

Remarks Eye contact with the product may lead to irritation.

**Sensitization**

Remarks Based on available data, the classification criteria are not met.

**Subacute, subchronic, chronic toxicity**

Remarks Based on available data, the classification criteria are not met.

**Mutagenicity**

Remarks Based on available data, the classification criteria are not met.

**Reproductive toxicity**

Remarks Based on available data, the classification criteria are not met.

**Carcinogenicity**

Remarks Based on available data, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT)**

Remarks Prolonged or repeated inhalation of the vapours may cause damage to the central nervous system.

**Specific Target Organ Toxicity (STOT) (Components)****Propan-2-ol**

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Remarks

May cause drowsiness and dizziness.

## 11.2 Information on other hazards

### Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

### 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

There is no data available on the product apart from the information given in this subsection.

## 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		

##### Butane

Species	Fish				
LC50		24,11	to	147,54	mg/l

##### 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		

##### Butane

Species	Algae				
EC50		7,71	to	16,5	mg/l

### 12.2. Persistence and degradability

#### General information

not determined

#### Biodegradability (Components)

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**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**

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 (log value)**

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 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

**12.7. 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
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Must not be disposed of together with household waste.

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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**

	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			
Limited Quantity	1 l		
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 Maritime transport in bulk according to IMO instruments**

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

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H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	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.

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.