

Trade name: Marking spray TopMarker 400 ml green

Version: 1 / SE

Date revised: 28.01.2025

Substance number:: 20148

Replaces Version: - / SE

Print date: 21.03.2025

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

1.1. Product identifier

Marking spray TopMarker 400 ml green

Registration no.

UFI

3KQS-N1G1-4003-9TDH

Substance / product identification

PR-No.

20122, 20123, 20124, 20148, 20149, 20150, 20156, 20157, 20158, 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)8086-933-302

E-mail address of person responsible for this SDS sdb-team@kerbl.com

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

Giftinformationscentralen - Swedish Poisons Information Centre, 17176 Stockholm

Tel.: +46 (8) 736 03 84

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

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

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.

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

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

Concentration limits (Regulation (EC) No. 1272/2008)

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ATE	oral	Eye Irrit. 2	H319	>= 50 < 100 %	
			1.187	mg/kg	
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**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

propane

CAS No.	74-98-6				
EINECS no.	200-827-9				
Concentration	>=	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. If possible, continue flushing until medical help arrives.

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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.

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 fumes. 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. 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

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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	
Concentration	1900	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 ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	

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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 ³

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 ³

propan-2-ol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Professional	
Duration of exposure	Repeated exposure	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	500	mg/m ³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Professional	
Duration of exposure	Repeated exposure	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	888	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Repeated exposure	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	319	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Repeated exposure	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	26	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	

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Duration of exposure	Repeated exposure	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	89	mg/m ³

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

propan-2-ol

Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	140,9	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	140,9	mg/l

Type of value	PNEC	
Type	Freshwater	
Concentration	140,9	mg/l

Type of value	PNEC	
Type	Soil	
Concentration	28	mg/kg/d

8.2. Exposure controls**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.

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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**

Physical state Aerosol

Colour According to product specification

Odour Alcohol

Melting point

Remarks not determined

Freezing point

Remarks not determined

Boiling point or initial boiling point and boiling range

Remarks not determined

Flammability

Flammable.

Upper and lower explosive limits

Remarks not determined

Flash point

Value -60 °C

Auto-ignition temperature

Remarks Not applicable

Decomposition temperature

Remarks Not relevant

pH value

Remarks not determined

Viscosity

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient n-octanol/water (log value)

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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 prescribed.

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

ATE 1.483,75 mg/kg

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

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Remarks

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

Acute oral toxicity (Components)**Ethanol**

Species

rat

LD50

1187

to

15010

mg/kg

propan-2-ol

Species

Rats (male/female)

LD50

5840

mg/kg

Acute dermal toxicity

Remarks

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

Acute dermal toxicity (Components)**ethanol**

Species

rabbit

LD50

17100

mg/kg

propan-2-ol

Species

rabbit

LD50

12800

mg/kg

Acute inhalational toxicity

Remarks

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

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

evaluation

irritant

Remarks

The classification criteria are met.

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.

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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)

Single exposure

Remarks May cause drowsiness and dizziness.

Single exposure

Remarks In high doses, the vapours cause headaches and symptoms of poisoning.

Repeated exposure

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

Remarks May cause drowsiness and dizziness.

Aspiration hazard

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

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)

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			

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Ethanol

Species	Fish				
LC50	14,2	to	15,4	g/l	
Duration of exposure	96	h			

Daphnia toxicity (Components)**propan-2-ol**

Species	Daphnia pulex			
LC50	> 10000			mg/l
Duration of exposure	24	h		

ethanol

Species	Daphnia magna			
EC50	12340			mg/l
Duration of exposure	48	h		

Algae toxicity (Components)**Butane**

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

Ethanol

Species	Algae			
EC50	275			mg/l
Duration of exposure	72	h		

12.2. Persistence and degradability**General information**

not determined

Biodegradability (Components)**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	

propan-2-ol

Value	53	%
Duration of test	5	d
Method	EU Method C.5	

Ethanol

Value	97	%
Duration of test	28	d
Method	OECD Guideline 301 B	

12.3. Bioaccumulative potential

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General information

The product is not bioaccumulating.

Partition coefficient n-octanol/water (log value)

Remarks not determined

Octanol/water partition coefficient (log Pow) (Components)

ethanol

log Pow -0,31

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.

Results of PBT and vPvB assessment

The product contains no PBT substances

The product contains no vPvB substances.

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

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

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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
14.1. UN number or ID 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	1 l	
Transport category	2		
14.5. Environmental hazards	-	no	-
Tunnel restriction code	D		

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

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurized container: may burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

CLP categories listed in Chapter 3

Aerosol 1	Aerosol, Category 1
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

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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.