

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

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 green

Registration no.

UFI 3KQS-N1G1-4003-9TDH

Substance / product identification

PR-No. 20122, 20148, 20157

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.

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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
---------	---------

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

EINECS no. 200-857-2
 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 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 \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

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.

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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.

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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	
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

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

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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	green	
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	

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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
---------	----------------

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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

Trade name: Marking spray TopMarker green




Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

	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	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	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.

Trade name: Marking spray TopMarker green

Version: 1 / GB

Date revised: 26.08.2021

Substance number: R-20122

Replaces Version: - / GB

Print date: 26.08.2021

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.