

Trade name: BladeCool 2.0

Version: 1 / GB

Date revised: 03.09.2021

Substance number: R-GTA103

Replaces Version: - / GB

Print date: 03.09.2021

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

1.1. Product identifier

BladeCool 2.0

Registration no.

UFI 2U80-90UX-K001-YRSY

Substance / product identification

PR-No. GTA103

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

Use of the substance/preparation

Cleaners

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

Skin Irrit. 2 H315

Eye Irrit. 2 H319

STOT SE 3 H336

Aquatic Chronic 3 H412

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

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains	Propan-2-ol; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane
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2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Propan-2-ol

CAS No.	67-63-0
EINECS no.	200-661-7
Registration no.	01-2119457558-25
Concentration	>= 10 < 20 %
Classification (Regulation (EC) No. 1272/2008)	
	Flam. Liq. 2 H225
	Eye Irrit. 2 H319
	STOT SE 3 H336

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

EINECS no.	921-024-6
Registration no.	01-2119475514-35
Concentration	>= 2,5 < 10 %
Classification (Regulation (EC) No. 1272/2008)	
	Flam. Liq. 2 H225

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Skin Irrit. 2	H315
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411

Further ingredients

Butane

CAS No.	106-97-8			
EINECS no.	203-448-7			
Registration no.	01-2119474691-32			
Concentration		>=	50	%
Advice: [3]				
Classification (Regulation (EC) No. 1272/2008)				
Flam. Gas 1	H220			
Press. Gas	H280			

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					
Registration no.	01-2119486944-21					
Concentration		>=	25	<	50	%
Advice: [3]						
Classification (Regulation (EC) No. 1272/2008)						
Flam. Gas 1	H220					
Press. Gas	H280					

Additional remarks:

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

Note

[3] Substance with occupational exposure limits

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. Clean body thoroughly (bath, shower). In any case show the physician the Safety Data Sheet.

After inhalation

Ensure supply of fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Summon a doctor immediately.

After skin contact

Take off contaminated clothing. Wash contaminated clothing before reuse. After contact with skin, wash immediately with plenty of water. Wash skin with plenty of soap and water. 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. Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

After ingestion

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Rinse out mouth and give plenty of water to drink. Summon a doctor immediately. Do not induce vomiting - aspiration hazard.

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

Until now no symptoms known so far.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Carbon dioxide, Foam, Dry powder

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Flammable aerosol. CAUTION: Aerosol cans can explode. May form explosive gas-air mixtures. In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂)

5.3. Advice for firefighters**Special protective equipment for fire-fighting**

Use self-contained breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Keep away sources of ignition. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothing. Use personal protective clothing.

6.2. Environmental precautions

Do not allow uncontrolled release of product into the environment. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material (eg sand, kieselgur, acid binder, universal binder, sawdust). When picked up, treat material as prescribed under Section 13 "Disposal".

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not breathe gas/fumes/vapour/spray. Do not pierce or burn, even after use.

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Advice on protection against fire and explosion

Do not spray against a flame or on a glowing object. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Keep away from sources of ignition - No smoking. Take action to prevent static discharges. Vapours can form an explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep out of reach of persons not familiar with the operation or the subject. Storage rooms must be properly ventilated. Store in cool, well ventilated area. Protect from heat. Protect against direct sunlight.

Hints on storage assembly

Do not store together with: Oxidising agents, Pyrophoric substances, self-heating hazardous substances, Do not store together with foodstuffs. Do not store together with animal feedstocks.

Storage classes

Storage class according to TRGS 510 2B Aerosol dispensers

7.3. Specific end use(s)

Aerosol

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

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

List	TRGS 900
Type	AGW
RCP-Gruppe C6-8 Aliphaten	
Value	700 mg/m ³
Maximum limit value: 2(II)	

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

There are not known any further control parameters.

Derived No/Minimal Effect Levels (DNEL/DMEL)

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

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

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Mode of action	Systemic effects	
Concentration	773	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	2035	mg/m ³
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	699	mg/kg/d
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	608	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	699	mg/kg/d
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	

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Mode of action	Systemic effects	
Concentration	26	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	89	mg/m ³

Predicted No Effect Concentration (PNEC)

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 inhale gases/vapours/aerosols. Personal protective equipment must comply with the Council Directive 89/686/EEC and the resulting CEN standards. At work do not eat, drink, smoke or take drugs. Take off immediately all contaminated clothing. Wash hands before breaks and after work.

Respiratory protection

Normally not necessary.

Hand protection

Chemical resistant gloves

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.

Appropriate Material	nitrile		
Material thickness	0,4	mm	
Breakthrough time	>= 240	min	

Eye protection

Eye protection must comply with EN 166. Safety goggles

Body protection

antistatic boots; light protective clothing, anti-static

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Form	liquid		
Colour	colourless		
Odour	Alcohol		
Odour threshold			
Remarks	not determined		
pH value			
Remarks	Not relevant		
Melting point			
Remarks	not determined		
Freezing point			
Remarks	not determined		
Initial boiling point and boiling range			
Value	< -20		°C
Flash point			
Value	< -20		°C
Evaporation rate (ether = 1) :			
Remarks	not determined		
Flammability (solid, gas)			
Not applicable			
Upper/lower flammability or explosive limits			
Lower explosion limit	1,5		%(V)
Upper explosion limit	10,9		%(V)
Vapour pressure			
Remarks	not determined		
Vapour density			
Value	0,58		g/cm ³
Temperature	20	°C	
Density			
Remarks	not determined		
Solubility in water			
Remarks	virtually insoluble		
Solubility(ies)			
Remarks	not determined		
Partition coefficient: n-octanol/water			
Reference substance	Propan-2-ol		
log Pow	0,05		
Reference substance	Butane		
log Pow	1,09		
Reference substance	Propane		
log Pow	1,09		
Ignition temperature			
Value	> 350		°C
Auto-ignition temperature			
Remarks	Not applicable		
Decomposition temperature			
Remarks	not determined		
Viscosity			

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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**

Extremely flammable aerosol. Container is under pressure: may burst when heated.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Vapours can form an explosive mixture with air. Keep away from: Flames and sparks. Hot surfaces.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

No data available.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity**

Remarks not determined

Acute oral toxicity (Components)**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane**

LD50 > 5000 mg/kg

Propan-2-olSpecies Rats (male/female)
LD50 5840 mg/kg**Acute dermal toxicity**

Remarks not determined

Acute dermal toxicity (Components)**Propan-2-ol**Species rabbit
LD50 13900 mg/kg**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane**

LD50 > 2800 to 3100 mg/kg

Acute inhalational toxicity

Remarks not determined

Acute inhalative toxicity (Components)**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane**

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LC50 > 25,2 mg/l
Administration/Form Vapors

Skin corrosion/irritation

evaluation irritant

Serious eye damage/irritation

evaluation strongly irritant

Sensitization

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

Subacute, subchronic, chronic toxicity

Remarks May cause drowsiness and dizziness.

Mutagenicity

Remarks not determined

Reproductive toxicity

Remarks not determined

Carcinogenicity

Remarks not determined

Specific Target Organ Toxicity (STOT)

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

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: Ecological information**12.1. Toxicity****General information**

not determined

Fish toxicity (Components)**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane**

Species rainbow trout (*Oncorhynchus mykiss*)
LC50 11,4 mg/l
Duration of exposure 96 h
Method OECD 203

Propan-2-ol

Species Fish
LC50 10000 mg/l
Duration of exposure 96 h

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

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

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

Species *Daphnia magna*
EC50 3 mg/l
Duration of exposure 48 h
Method OECD 202

Algae toxicity (Components)

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

Species	Pseudokirchneriella subcapitata		
ErC50	10	to	30 mg/l
Duration of exposure	72	h	
Method	OECD 201		

Propan-2-ol

Species	Scenedesmus subspicatus		
ErC50	> 100		mg/l
Duration of exposure	72	h	

12.2. Persistence and degradability**General information**

not determined

Biodegradability

Reference substance	Propan-2-ol		
Value	95		%
Duration of test	21	d	
Remarks	The product is readily biodegradable according to OECD criteria.		
Reference substance	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclenes, <5% n-hexane		
Value	98		%
Duration of test	28	d	
Remarks	The product is readily biodegradable according to OECD criteria.		

12.3. Bioaccumulative potential**General information**

not determined

Partition coefficient: n-octanol/water

Reference substance	Propan-2-ol		
log Pow	0,05		
Reference substance	Butane		
log Pow	1,09		
Reference substance	Propane		
log Pow	1,09		

12.4. Mobility in soil**General information**

not determined

12.5. Results of PBT and vPvB assessment**General information**

not determined

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**

Do not allow to enter drains.

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Do not allow to enter waters.
 Do not discharge into the subsoil/soil.
 Dispose of waste according to applicable legislation.
 Allocation of a waste code number, according to the European Waste Catalogue (EWC), should be carried out in agreement with the regional waste disposal company.
 EWC waste code 16 05 04* gases in pressure containers (including halons) containing dangerous substances

Disposal recommendations for packaging

Uncontaminated packaging may be reused.
 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	-		-

Information for all modes of transport

14.6. Special precautions for user
 none

Other information

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Major-accident categories acc. 2012/18/EU

Category P3a FLAMMABLE AEROSOLS

VOC

VOC (CH) 99,6 %

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VOC (EU) 99,6 %

15.2. Chemical safety assessment

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

SECTION 16: Other information

The classification was carried out according to the calculation method of Regulation (EC) No. 1272/2008 (CLP Regulation).

Hazard statements listed in Chapter 3

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Skin Irrit. 2	Skin irritation, 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.