
SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Name of product RIEGLER Bio-Cut / 400 ml
Code-Nr. R3210/400 / ID-Nr. 114568

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended intended purpose(s)

Technical Aerosols

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor RIEGLER & Co. KG
Schützenstr. 27, D-72574 Bad Urach
Phone : +49 (0) 7125/9497-0, Fax : +49 (0) 7125/9497-97
E-Mail : zedok@riegler.de
Internet : www.riegler.de

Advice Abteilung eDocumentation
Phone : +49 (0) 7125/9497-0
Fax : +49 (0) 7125/9497-97
E-mail (competent person):
zedok@riegler.de

1.4. Emergency telephone number

Emergency advice Giftnotrufzentrale Bonn
Phone : +49(0)228-19 240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aerosol 1	H222, H229	
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Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**

GHS02

Signal word

Danger

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

Product has an anesthetic effect.

Information pertaining to special dangers for human and environment

In extensive use, formation of flammable / explosive vapour-air mixture is possible.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

! SECTION 3: Composition/ information on ingredients**3.1. Substances**

not applicable

3.2. Mixtures**Description**

Cutting oil.

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
74-98-6	200-827-9	propane	10 - 15	Flam. Gas 1, H220 / Press. Gas
106-97-8	203-448-7	Butan (1,3 Butadiene <0,1%)	10 - 15	Flam. Gas 1, H220 / Press. Gas, H280

REACH

CAS No	Name	REACH registration number
74-98-6	propane	01-2119486944-21
106-97-8	Butan (1,3 Butadiene <0,1%)	01-2119474691-32

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

In case of inhalation

Ensure of fresh air.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Call for a doctor immediately.
Rinse out mouth thoroughly with water.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

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

Foam
Dry powder
Carbon dioxide

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Danger of bursting
In case of fire formation of dangerous gases possible.

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

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

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

Ensure adequate ventilation.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions

Do not discharge into the drains or bodies of water..
Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).
After taking up the material dispose according to regulation.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

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

Ventilate closed rooms at ground level.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

General protective measures

Do not inhale dust/fumes/aerosols.

Hygiene measures

At work do not eat, drink, smoke or take drugs.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Do not spray on a naked flame or any incandescent material.

Pressurized container.

Do not pierce or burn even after use.

Protect from heat and sunlight.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep in closed original container.

Adhere to administrative regulations relating to storage of compressed gas cylinders / containers.

Further information on storage conditions

Protect from direct solar radiation.

Storage temperature may not exceed 50°C (=122°F).

Store container at cool and aired place.

7.3. Specific end use(s)**Recommendation(s) for intended use**

See section 1.2

! SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Ingredients with occupational exposure limits to be monitored**

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
106-97-8	Butane	8 hours	1450	600	EH40/2005
		Short-term	1810	750	

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls**Respiratory protection**

If ventilation insufficient, wear respiratory protection.

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: butyl rubber, 0,7mm; 480min

Eye protection

tightly fitting goggles

Other protection measures
 protective clothing

Appropriate engineering controls
 Sufficient ventilation and exhaustion.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance aerosol	Colour colourless	Odour characteristic
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Odour threshold
 not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not applicable				
Melting point / Freezing point	not determined				
Flash point	not applicable				Aerosol
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 250 °C				
Self ignition temperature	not determined				
Lower explosion limit	0,6 Vol-%				
Upper explosion limit	not determined				
Vapour pressure	3,5 bar	20 °C			Doseninnendruck
Relative density	0,72 g/ml	20 °C			calculated
Vapour density	not determined				
Solubility in water					difficult to dissolve
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				

	Value	Temperature	at	Method	Remark
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Viscosity not determined

Oxidising properties

No information available.

Explosive properties

The product is considered non-explosive ; nevertheless explosive vapour/air mixtures can be generated .

9.2. Other information

No information available.

! SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat.

Formation of explosive gas/air mixtures.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Experiences made from practice**

Inhalation causes narcotic effect/intoxication.

Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

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

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

General regulation

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

15 01 10*

Name of waste

packaging containing residues of or contaminated by hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

Recommendations for the product

Remove in accordance with local official regulations.

Recommendations for packaging

Totally emptied packaging may be treated as household waste.

General information

For proper waste disposal a complete emptying of the tin is necessary.

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)	2.1	2.1	2.1
14.4. Packing group	-	-	-
14.5. Environmental hazards	No	No	No

14.6. Special precautions for user

Caution: Gases

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Land and inland navigation transport ADR/RID

Hazard label(s) 2.1

tunnel restriction code D

Classification code 5F

transport in "limited quantities" according to 3.4 ADR is possible

! SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****! VOC standard**

VOC content	24 %
VOC value	186,8 g/L

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 8.3

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.