according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Aesculap BladeCool

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

Use of the substance/mixture

Coolnat/cleaner spray for shearing heads/blades

1.3. Details of the supplier of the safety data sheet

Company name:	Albert Kerbl GmbH
Street:	Felizenzell 9
Place:	D-84428 Buchbach / Germany
Telephone:	+49 (0) 8086 933-100
e-mail:	info@kerbl.de
Internet:	www.kerbl.de
Responsible Department:	Albert Kerbl GmbH
	Tel.: 0049-(0)8086-933-104
	E-Mail: bm@kerbl.com
1.4. Emergency telephone	In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 1 Skin corrosion/irritation: Skin Irrit. 2 Serious eye damage/eye irritation: Eye Irrit. 2 Specific target organ toxicity - single exposure: STOT SE 3 Hazardous to the aquatic environment: Aquatic Chronic 2 Hazard Statements: Extremely flammable aerosol. Pressurised container: May burst if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclioalkanes acetone

Signal word:

Danger

Pictograms:





Hazard statements

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

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H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	
H411	Toxic to aquatic life with long lasting effects.	
Precautionary statemer	nts	
P210	Keep away from heat. No Smoking.	
P211	Do not spray on an open flame or other ignition source.	
P251	Do not pierce or burn, even after use.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	
Special labelling of cert	ain mixtures	
EUH208	Contains Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and	
	2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.	
PBT / vPvB substance	tion (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a ce. nmable/explosive vapour-air mixture.	

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aerosols

according to Regulation (EC) No 1907/2006

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regula	tion (EC) No. 1272/2008 [CLP]		
64742-49-0	Hydrocarbons, C7, n-alkanes, iso	alkanes, cyclioalkanes		30 - 60 %
	927-510-4		01-2119475515-33	
	Flam. Liq. 2, Skin Irrit. 2, STOT S H411	E 3, Asp. Tox. 1, Aquatic Chronic 2; H	H225 H315 H336 H304	
64742-65-0	Distillates (petroleum)			15 - 30 %
	265-169-7	649-474-00-6	01-2119471299-27	
	Asp. Tox. 1; H304			
74-98-6	Propane			10 - 40 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Compressed gas; H	220 H280		
106-97-8	Butane			10 - 40 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Compressed gas; H	220 H280		
67-64-1	acetone			5 - 20 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE	3; H225 H319 H336 EUH066		
55965-84-9	Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one		< 0,0015 %	
		613-167-00-5		
	, , ,	Tox. 3, Skin Corr. 1B, Skin Sens. 1, / 1); H331 H311 H301 H314 H317 H4	· · · · ·	

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately. Take away from danger area and lay down affected person.

Take away norm danger area and lay down and

After inhalation Ensure of fresh air.

In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

After ingestion

Rinse mouth.

Never give anything by mouth to an unconscious person.

Do not induce vomiting.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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

Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO2), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce: carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Use breathing apparatus with independent air supply. Protective suit

Additional information

Cool containers at risk with water spray jet. Heating will cause pressure rise with risk of bursting. The vapour/air mixture is explosive, even in empty, uncleaned receptacles. Fire residues and contaminated firefighting 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

Ensure adequate ventilation. Remove all sources of ignition. Avoid contact with skin, eyes and clothing. Use personal protection equipment. Keep unprotected persons away.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water. Do not discharge into the subsoil/soil. Inform competent authority about release into the sewage, ground or into waters.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8). Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe aerosol

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Advice on protection against fire and explosion

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Without adequate ventilation formation of explosive mixtures may be possible.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place. Recommended storage temperature: $5^{\circ}C - 30^{\circ}C$

Hints on joint storage

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Coolnat/cleaner spray for shearing heads/blades

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Do not breathe aerosol

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with eyes, skin or mucous membrane.

Eye/face protection

Safety goggles with side protection (EN 166). Eve wash bottle with pure water (EN 15154).

Hand protection

Splash protection:

Protective gloves resistant to chemicals made off nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 30 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

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Skin protection Long sleeved clothing (DIN EN ISC Respiratory protection No personal respiratory protective In case of insufficient ventilation w ECTION 9: Physical and chemical	equipment normally required. ear suitable respiratory equipment (gas filter type AX) (EN 14387).		
1. Information on basic physical and c Physical state:	Aerosol			
Colour:	Colourless			
Odour:	Characteristic			
		Test method		
pH-Value:	n.d			
Changes in the physical state				
Melting point:	n.d			
Initial boiling point and boiling range:	< 0 °C	,		
Sublimation point:	n.a			
Softening point:	n.a			
Flash point:	< - 80 °C	ン*)		
Flammability				
Solid:	n.a			
Gas:	n.a			
Explosive properties In use, may form flammable/explos	sive vapour-air mixture.			
Lower explosion limits:	1,4 vol. %	, o *)		
Upper explosion limits:	10,8 vol. %	ó *)		
Ignition temperature:	365 - 460 °C	2 *)		
Auto-ignition temperature				
Solid:	n.a			
Gas:	n.a			
Decomposition temperature:	n.d			
Oxidizing properties Not oxidising.				
Vapour pressure: (at 20 °C)	2080 - 8330 hP	a *)		
Density (at 20 °C):	n.d			
Bulk density:	n.a			
Water solubility: (at 20 °C)	Immiscible	3		
Solubility in other solvents n.d.				
Partition coefficient:	n.d			
Viscosity / dynamic:	n.d			
Viscosity / kinematic:	n.d	L.		
-				
Flow time:	n.d			

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Vapour density:	n.d	
Evaporation rate:	n.d	
9.2. Other information		
*) Propellant		
SECTION 10: Stability and reactivity	ty	
<u>10.1. Reactivity</u> No decomposition if stored and a	applied as directed.	

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4. Conditions to avoid

Fire or intense heat may cause violent rupture of packages.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met. No toxicological data available.

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Contains Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclioalkanes)

STOT-repeated exposure

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

Aspiration hazard

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

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Evaporative cooling effect during use.

Contact with eyes, skin or oral tissues may cause irritation.

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SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available. Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system. Ecological injuries are not known or expected under normal use.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Should not be disposed of with household waste. Do not allow to enter into surface water or drains.

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

The waste key provided is a recommendation of the manufacturer. Fix correct waste code with the disposer

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Offer empty spray cans to an established disposal company.

SECTION 14: Transport information

and transport (ADR/RID)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Limited quantity:	1 L / 30 kg
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D
Tunnel restriction code:	D

L

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Inland waterways transport (ADN)			
<u>14.1. UN number:</u>	UN 1950		
14.2. UN proper shipping name:	AEROSOLS		
14.3. Transport hazard class(es):	2		
14.4. Packing group:	-		
Hazard label:	2.1		
	2		
Classification code:	5F		
Limited quantity:	1 L / 30 kg		
Excepted quantity:	E0		
Marine transport (IMDG)			
<u>14.1. UN number:</u>	UN 1950		
14.2. UN proper shipping name:	AEROSOLS (Hydroca	rbons, C7, n-Alkanes, isoalkanes, cycloalkanes)	
14.3. Transport hazard class(es):	2.1		
14.4. Packing group:	-		
Hazard label:	2.1		
Marine pollutant:	Yes		
Limited quantity:	1 L / 30 kg		
Excepted quantity:	E0		
EmS:	F-D, S-U		
Air transport (ICAO-TI/IATA-DGR)			
<u>14.1. UN number:</u>	UN 1950		
14.2. UN proper shipping name:	AEROSOLS		
<u>14.3. Transport hazard class(es):</u>	2.1		
14.4. Packing group:	-		
Hazard label:	2.1		
Limited quantity Passenger:	30 kg G		
Passenger LQ:	Y203		
Excepted quantity:	E0		
IATA-packing instructions - Passenger:		203	
IATA-max. quantity - Passenger:		75 kg	
IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:		203 I50 kg	
14.5. Environmental hazards			
ENVIRONMENTALLY HAZARDOUS:	yes	\sim	
	yuu	¥.,	

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 <u>14.6. Special precautions for user</u> Handle in accordance with good indu <u>14.7. Transport in bulk according to Annex</u> The transport takes place only in app 	II of Marpol and the IBC Code	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental reg	ulations/legislation specific for the substance or mix	ture
EU regulatory information		
Restrictions on use (REACH, annex XVII):	
Entry 28: Hydrocarbons, C7, n-alkane	es, isoalkanes, cyclioalkanes; Butane; Isobutane	
2004/42/EC (VOC):	100 %	
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juvenils accord work protection guideline' (94/33/EC). Observe emp	0

under the Maternity Protection Directive (92/85/EEC) for expectant or

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

nursing mothers.

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H301	Toxic if swallowed.

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H304	May be fatal if swallowed and enters airways.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H336	May cause drowsiness or dizziness.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
EUH066	Repeated exposure may cause skin dryness or cracking.	
EUH208	Contains Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and	
	2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.	
Further Information		

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)