

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

Name of product RIEGLER Lock activator F / 200 ml
Code-Nr. R3150/200 / ID-Nr. 114565

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

Activator for passive surfaces

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
Eye Irrit. 2	H319
STOT SE 3	H336
Aquatic Chronic 3	H412

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

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

GHS02



GHS07

Signal word
Danger

Hazard Statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

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.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
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.

! Hazardous ingredients for labeling

propan-2-ol

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

Organic chemicals in a solvent mixture.

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
64-17-5	200-578-6	ethanol	30 - 60	Flam. Liq. 2, H225

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
67-63-0	200-661-7	propan-2-ol	10 - 30	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336
1338-02-9	215-657-0	Naphthenic acids, copper salts	0,1 < 1	Flam. Liq. 3, H226 / Acute Tox. 4, H302 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
811-97-2	212-377-0	norflurane	< 1	Liquefied gas, H280
22221-10-9	244-846-0	2-ETHYLHEXANOIC ACID, COPPER SALT	0,1 < 1	Acute Tox. 4, H302 / Aquatic Acute 1, H400 M=1 / Aquatic Chronic 1, H410 M=1
87741-01-3	289-339-5	Kohlenwasserstoffe, C4; Gase aus Erdölverarbeitung	10 - 30	Press. Gas / Flam. Gas 1, H220 / (Note K) /

REACH

CAS No	Name	REACH registration number
64-17-5	ethanol	01-2119457610-43
67-63-0	propan-2-ol	01-2119457558-25
1338-02-9	Naphthenic acids, copper salts	not subject to registration
811-97-2	norflurane	01-2119459374-33
22221-10-9	2-ETHYLHEXANOIC ACID, COPPER SALT	not subject to registration
87741-01-3	Kohlenwasserstoffe, C4; Gase aus Erdölverarbeitung	01-2119480480-41

! Additional advice

CAS: 87741-01-3, Note K applied (< 0,1% w/w 1,3 butadiene - EINECS 203-450-8)

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 soap and water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with water.

Call for a doctor immediately.

In case of ingestion

Do not induce vomiting.

Medical treatment.

Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed
Physician's information / possible symptoms

Unconsciousness

Anaesthetic state

Headache

Confusion

Dizziness

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

Alcohol-resistant foam
Dry powder
Carbon dioxide
sand
Water spray jet

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.
Carbon monoxide (CO)
Carbon dioxide (CO₂)

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.
Do not inhale explosion and/or combustion gases.

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.
Use breathing apparatus if exposed to vapours/dust/aerosol.

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

Allow to vaporise.
Take up residues with absorbent material (e.g. sand, sawdust, general-purpose binder).
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

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

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

Remove soiled or soaked clothing immediately.

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.

Do not pierce or burn even after use.

The product is combustible.

Vapours can form an explosive mixture with air.

Avoid effect of heat.

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.

Advice on storage compatibility

Do not store together with animal feedstuffs.

Do not store together with food.

Further information on storage conditions

Keep container tightly closed and store at cool and aired place.

Protect from heat and direct solar radiation.

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

Protect from heat/overheating.

Recommended storage temperature: room temperature.

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/m3]	[ppm]	Remark
106-97-8	Butane	8 hours Short-term	1450 1810	600 750	EH40/2005
64-17-5	ethanol	8 hours	1920	1000	EH40/2005
67-63-0	propan-2-ol	8 hours Short-term	999 1250	400 500	EH40/2005
811-97-2	1,1,1,2-Tetrafluoroethane (HFC 134a)	8 hours	4240	1000	EH40/2005

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
64-17-5	ethanol	343 mg/kg	DNEL long-term dermal (systemic)	
		950 mg/m3	DNEL acute inhalative (systemic)	
		1900 mg/m3	DNEL acute inhalative (local)	
67-63-0	propan-2-ol	888 mg/kg bw/day	DNEL long-term dermal (systemic)	
		500 mg/m3	DNEL long-term inhalative (systemic)	

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls
Respiratory protection

If ventilation insufficient, wear respiratory protection.

Breathing apparatus in the event of aerosol or mist formation.

Hand protection

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

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

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: fluorinated rubber; 0,7mm; 480min; 60min;

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

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

! SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
Appearance

aerosol

Colour

green

Odour

alcoholic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	78 °C				
melting point	-122 °C				
Flash point	not applicable				

	Value	Temperature	at	Method	Remark
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	0,79 g/cm ³				
Vapour density	not determined				
Solubility in water					soluble
Solubility/other				Organic solvent	soluble
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity dynamic	not applicable				
Viscosity kinematic	not applicable				
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

Exothermic reaction with hardener component.

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

Gases/vapours, toxic

Carbon monoxide and carbon dioxide.

Thermal decomposition

Remark No decomposition if used as directed.

! SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
LD50 acute oral	2000 mg/kg	rat		Propanol
LD50 acute dermal	2000 mg/kg	rabbit		Propane-2-ol
LC50 acute inhalation	658 mg/l ()	rat	dust/mist	Propane
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	irritant			
Skin sensitization	non-sensitizing			

! Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

Experiences made from practice

Has a degreasing effect on the skin.

Inhalation causes headache/nausea.

Causes eye irritation.

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.

The product has not been tested. The information is derived from the properties of the individual components.

! SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicological effects**

	Value	Species	Method	Validation
Fish	LC50 14,2 g/l (96 h)	Pimephales promelas		Ethanol
Daphnia	LC50 29,6 g/l (24 h)	Brachionus calyciflorus		Ethanol
Algae	EC50 11,89 g/l (96 h)	Green algae		Propan
Bacteria	TGK 1050 mg/l	Pseudomonas putida		Propane-2-ol

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

Harmful to aquatic life with long lasting effects.

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

The ecotoxic effect of the product has not been tested. The information on this was derived from products of similar structure or composition.

! SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.

16 05 04*

Name of waste

gases in pressure containers (including halons) containing 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

Dispose of according to the local waste regulations.

Packaging that cannot be cleaned should be disposed of like the product.

! General information

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

	ADR/RID	IMDG	IATA-DGR
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	99 %
VOC value	792 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: 8.2

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.