SAFETY DATA SHEET



RIEGLER Lock activator F

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

1.1 Product identifier

Product name : RIEGLER Lock activator F : V1S2-A0CV-500T-N8VF UFI : R3150/200 / ID-Nr. 114565 **Product code**

Color : Green.

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

Identified uses

Aerosol product-Activators-Surface treatment products

1.3 Details of the supplier of the safety data sheet

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

e-mail address of person responsible for this SDS

: Abteilung eDocumentation Phone: +49 (0) 7125/9497-0 Fax: +49 (0) 7125/9497-97

zedok@riegler.de

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aerosol 1, H222, H229 Eye Irrit. 2, H319 **STOT SE 3, H336** Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms





Signal word : Danger

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SECTION 2: Hazards identification

Hazard statements : H222, H229 - Extremely flammable aerosol. Pressurized 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

Prevention: P280 - Wear eye or face protection.

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.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment. P261 - Avoid breathing dust or mist. P264 - Wash thoroughly after handling. P251 - Do not pierce or burn, even after use.

Response : P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : P405 - Store locked up.

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50

°C/122 °F.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal : P501 - Dispose of waste according to applicable legislation.

Hazardous ingredients

Supplemental label elements

: propan-2-ol: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and

placing on the market and use of certain dangerous substances. mixtures and

articles

: Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: Aspiration hazard - Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥25 - ≤50	Flam. Liq. 2, H225	-	[2]
propane	REACH #: 01-2119486944-21 EC: 200-827-9 CAS: 74-98-6	≥10 - ≤25	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	-	[2]

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SECTION 3: Composition/information on ingredients

	Index: 601-003-00-5				
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[1] [2]
naphthenic acids, copper salts	REACH #: 01-2120796341-51 EC: 215-657-0 CAS: 1338-02-9 Index: 029-003-00-5	<1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 2000 mg/kg M [Acute] = 1 M [Chronic] = 1	[1] [2]
2-ethylhexanoic acid, copper salt	REACH #: 01-2120789200-58 EC: 244-846-0 CAS: 22221-10-9	<1	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1] [2]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact :

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or weightened.

waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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SECTION 4: First aid measures

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data. Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is harmful to aquatic life with long lasting effects. Fire water

contaminated with this material must be contained and prevented from being

discharged to any waterway, sewer or drain.

Hazardous combustion

products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special protective actions

for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk.

Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

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SECTION 7: Handling and storage

Category	Notification and MAPP threshold	Safety report threshold
P3a	150 tonne	500 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
ethanol	TRGS 900 OEL (Germany, 7/2021).
	TWA: 380 mg/m ³ 8 hours.
	PEAK: 1520 mg/m³ 15 minutes.
	TWA: 200 ppm 8 hours.
	PEAK: 800 ppm 15 minutes.
	DFG MAC-values list (Germany, 10/2021).
	TWA: 200 ppm 8 hours.
	PEAK: 800 ppm, 4 times per shift, 15 minutes.
	TWA: 380 mg/m³ 8 hours.
	PEAK: 1520 mg/m³, 4 times per shift, 15 minutes.
	• • • • • • • • • • • • • • • • • • • •
propane	TRGS 900 OEL (Germany, 7/2021).
	TWA: 1800 mg/m³ 8 hours.
	PEAK: 7200 mg/m³ 15 minutes.
	TWA: 1000 ppm 8 hours.
	PEAK: 4000 ppm 15 minutes.
	DFG MAC-values list (Germany, 10/2021).
	TWA: 1000 ppm 8 hours.
	PEAK: 4000 ppm, 4 times per shift, 15 minutes.
	TWA: 1800 mg/m³ 8 hours.
	PEAK: 7200 mg/m³, 4 times per shift, 15 minutes.
propan-2-ol	TRGS 900 OEL (Germany, 7/2021).
F. 0 F S. 1	TWA: 500 mg/m ³ 8 hours.
	PEAK: 1000 mg/m³ 15 minutes.
	TWA: 200 ppm 8 hours.
	PEAK: 400 ppm 15 minutes.
	DFG MAC-values list (Germany, 10/2021).
	TWA: 200 ppm 8 hours.
	PEAK: 400 ppm, 4 times per shift, 15 minutes.
	TWA: 500 mg/m ³ 8 hours.
	PEAK: 1000 mg/m³, 4 times per shift, 15 minutes.
	1 27 th. 1000 mg/m ; 1 times per office, 10 minutes.
naphthenic acids, copper salts	DFG MAC-values list (Germany, 10/2021). [Copper and its
	inorganic compounds]
	PEAK: 0.02 mg/m³, 4 times per shift, 15 minutes. Form:
	respirable fraction
	TWA: 0.01 mg/m³ 8 hours. Form: respirable fraction
2-ethylhexanoic acid, copper salt	DFG MAC-values list (Germany, 10/2021). [Copper and its inorganic compounds]

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SECTION 8: Exposure controls/personal protection

PEAK: 0.02 mg/m³, 4 times per shift, 15 minutes. Form:

respirable fraction

TWA: 0.01 mg/m³ 8 hours. Form: respirable fraction

Recommended monitoring procedures

: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
propan-2-ol	DNEL	Long term Oral	26 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	89 mg/m³	General population	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	500 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
naphthenic acids, copper salts	DNEL	Long term Inhalation	0.16 mg/m ³	General population	Systemic
	DNEL	Long term Oral	0.18 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.18 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.36 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.63 mg/m ³	Workers	Systemic
2-ethylhexanoic acid, copper salt	DNEL	Long term Inhalation	0.17 mg/m³	General population	Systemic
	DNEL	Long term Oral	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.39 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.69 mg/m³	Workers	Systemic

PNECs

No PNECs available.

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SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended: 1 - 4 hours (breakthrough time): nitrile rubber 4 - 8 hours (breakthrough time): Viton®/butyl rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapor (Type AX) and particulate filter

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Aerosol.

Color : Green.

Odor : Alcohol-like.

Odor threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and : 78°C (172.4°F)

boiling range

Flammability : Not available.

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SECTION 9: Physical and chemical properties

Upper/lower flammability or

explosive limits

: Lower: 0.6%

Flash point : Closed cup: Not applicable.

Auto-ignition temperature: Not applicable.Decomposition temperature: Not available.pH: Not applicable.Viscosity: Not available.

Solubility(ies) :

Not available.

Vapor pressure

Solubility in water : Not available.

Miscible with water : Yes.

Partition coefficient: n-octanol/: Not applicable.

water

: 350 kPa (2625.2 mm Hg)

Relative density : Not available.

Density : 0.79 g/cm³

Vapor density : Not available.

Explosive properties : Not available.

Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SADT : Not available.

SAPT : Not available.

Heat of combustion : 9.409 kJ/g

Aerosol product

Type of aerosol : Spray

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame).

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
naphthenic acids, copper salts	LD50 Oral	Rat	2 g/kg	-

Conclusion/Summary: Not available.

Acute toxicity estimates

	ATE value
Not available.	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Conclusion/Summary

: Not available.

Sensitization

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

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SECTION 11: Toxicological information

Skin contact: No known significant effects or critical hazards.

Ingestion: Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation: Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate :

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

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SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
propan-2-ol	Acute EC50 7550 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
naphthenic acids, copper salts	Acute LC50 3300 to 10000 μg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 0.044 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 0.161 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
propan-2-ol	0.05	-	low

12.4 Mobility in soil

Soil/water partition

: Not available.

coefficient (Koc)

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

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SECTION 13: Disposal considerations

Waste code	Waste designation
16 05 04*	gases in pressure containers (including halons) containing hazardous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
15 01 04	metallic packaging

Special precautions

: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3 Transport hazard class(es)	2	2.1	2.1
14.4 Packing group	-	-	-
14.5 Environmental hazards	No. Not available.	No. Not available.	No.

Additional information

ADR/RID

IMDG

IATA

: Limited quantity 1 L

Special provisions 190, 327, 625, 344

Tunnel code (D)

ADR Classification Code: 5F : Emergency schedules F-D, S-U

Special provisions 63, 190, 277, 327, 344, 381, 959

Quantity limitation Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities -

Passenger Aircraft: 30 kg. Packaging instructions: Y203.

Special provisions A145, A167, A802

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not available.

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Restrictions on Manufacture, Marketing and Use

CountryProduct name		Conc.	Designation	Usage
GB	RIEGLER Lock activator F	100	28	Restricted to professional
				users.
GB	RIEGLER Lock activator F	100	29	Restricted to professional
				users.

Other EU regulations

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Aerosol dispensers :

3



Extremely flammable

 VOC content
 : 99 %

 VOC (g/L)
 : 792

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

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SECTION 15: Regulatory information

Category	
P3a	

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
	DFG MAC-values list	Ethanol; Ethyl alcohol Copper and its inorganic compounds	K3, M3 K3	-

Storage class (TRGS 510) : 2B Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
P3a	1.2.3.1

Hazard class for water : 3

Technical instruction on: TA-Luft Number 5.2.5: 50-100%

air quality control TA-Luft Class I - Number 5.2.7.1.1: 10-30% TA-Luft Class III - Number 5.2.2: 0-2%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : All components are listed or exempted.

China : Not determined.

Eurasian Economic Union: Russian Federation inventory: All components are listed or exempted.

Japan : Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : All components are listed or exempted.

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SECTION 15: Regulatory information

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still

required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aerosol 1, H222, H229	On basis of test data
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H220	Extremely flammable gas.
H222, H229	Extremely flammable aerosol. Pressurized container: may burst if
	heated.
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
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.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aerosol 1	AEROSOLS - Category 1
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Gas 1A	FLAMMABLE GASES - Category 1A
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -
	Category 3

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SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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