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

1.1. Product identifier

Name of product

RIEGLER LOCK AN 302-21 / 50 ml / 250 ml
Code-Nr. ID-Nr. 114551/-52

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

Recommended intended purpose(s)
1-Component Adhesives and Sealants, anaerobic curing

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]

Additional hints
This mixture is not classified as hazardous according to Regulation (EC) 1272/2008 [GHS].

2.2. Label elements

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

Precautionary Statements
P262 Do not get in eyes, on skin, or on clothing.

2.3. Other hazards

Information pertaining to special dangers for human and environment
Although this product is not subject to reporting requirements for hazardous products, we recommend compliance with the safety recommendations.

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
Anaerobic adhesive / sealant

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
80-15-9	201-254-7	cumene hydroperoxide	0,1 < 1	Org. Perox. E, H242 / Acute Tox. 3, H331 / Acute Tox. 4, H312 / Acute Tox. 4, H302 / STOT RE 2, H373 / Skin Corr. 1B, H314 / Aquatic Chronic 2, H411
107-21-1	203-473-3	ethanediol	< 1	Acute Tox. 4, H302 / STOT RE 2, H373

REACH

CAS No	Name	REACH registration number
80-15-9	cumene hydroperoxide	01-2119475796-19
107-21-1	ethanediol	01-2119456816-28

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 immediately 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 plenty of water and seek medical advice.

In case of ingestion
Do not induce vomiting.
Refer to medical treatment.
If swallowed give water to drink.

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

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 fire-extinguishing substance
Carbon dioxide
sand
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
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.

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

6.2. Environmental precautions
Do not discharge into the drains/surface waters/groundwater.
Do not discharge into the subsoil/soil.

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
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 and smoke.
Remove soiled or soaked clothing immediately.
Wash hands before breaks and after work.

Advice on protection against fire and explosion
Pay attention to general rules of internal fire prevention.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep only in original container.

Advice on storage compatibility
Do not store with acids or alkalies.
Do not store with oxidizing agents.
Do not store together with animal feedstuffs.
Do not store together with food.
Do not store together with reducing agents.

Further information on storage conditions
Keep container tightly closed and store at cool and aired place.
Protect from heat and direct solar radiation.

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
107-21-1	Ethane-1,2-diol: particulate	8 hours	10		EH40/2005
107-21-1	Ethane-1,2-diol: vapour	8 hours	52	20	EH40/2005
		Short-term	104	40	

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
107-21-1	ethanediol	8 hours	52	20	skin
		Short-term	104	40	

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
80-15-9	cumene hydroperoxide	6 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
Not required

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]: 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	Colour	Odour
liquid	violet	characteristic

Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	not determined				
melting point	not determined				
Flash point	> 100 °C				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	1,05 g/ml				
Vapour density	not determined				
Solubility in water					insoluble
Solubility/other			Organic solvent		soluble

	Value	Temperature	at	Method	Remark
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	ca. 150 mPa*s	25 °C			

Oxidising properties
No information available.

Explosive properties
not determined

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
Reactions with acids, alkalies and oxidising agents.
Reactions with reducing agents.

10.4. Conditions to avoid
Keep away from heat.

10.5. Incompatible materials
Substances to avoid
Alkali (lye), concentrated
Acid, concentrated
Oxidising agent, strong
Reducing agent, strong

10.6. Hazardous decomposition products
Gases/vapours, flammable
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	382 mg/kg	rat		CAS: 80-15-9
LD50 acute dermal	3500 mg/kg	mouse		CAS: 107-21-1
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	low irritant - no labeling duty			
Skin sensitization	non-sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.
Reproduction-Toxicity				No indications of toxic effects were observed in reproduction studies in animals.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

Experiences made from practice
Frequent and / or prolonged contact may lead to skin irritation
Experiences at humans: may cause hypersensitivity reactions on skin in case of persons suffering from hypersensitivity.

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

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 3,9 mg/l (96 h)	rainbow trout		CAS: 80-15-9
Daphnia	EC50 > 100 mg/l (48 h)	Daphnia magna		CAS: 107-21-1
Algae	EC50 6500 - 13000 mg/l (96 h)	Selenastrum capricornutum		CAS: 107-21-1

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability	CAS: 80-15-9			readily degradable

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	**Name of waste**
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09

Recommendations for the product
Remove in accordance with local official regulations.

Recommendations for packaging
Dispose of according to the local waste regulations.

SECTION 14: Transport information

	ADR/RID	**IMDG**	**IATA-DGR**
14.1. UN number	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-
14.5. Environmental hazards	-	-	-

14.6. Special precautions for user
No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

Transport/further information
No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.

! SECTION 15: Regulatory information

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

VOC standard

VOC content	ca.3 %
VOC value	29,6 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

H242	Heating may cause a fire.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H373	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H411	Toxic to aquatic life with long lasting effects.