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

Name of product RIEGLER Seal and glue remover / 400ml
Code-Nr. R3180/400 / ID-Nr. 114569

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	
Eye Irrit. 2	H319	
STOT SE 3	H336	

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

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.

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.
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 + P235	Store in a well-ventilated place. Keep cool.
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

1-methoxy-2-propanol, acetone, n-butyl acetate

Supplemental Hazard information (EU)

Repeated exposure may cause skin dryness or cracking.

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**Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
67-64-1	200-662-2	acetone	25 - 50	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336
108-94-1	203-631-1	cyclohexanone	2,5 - 5	Flam. Liq. 3, H226 / Acute Tox. 4, H332
112-34-5	203-961-6	2-(2-butoxyethoxy)ethanol	< 3	Eye Irrit. 2, H319

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
115-10-6	204-065-8	dimethylether	25 - 50	Flam. Gas 1, H220 / Press. Gas
123-86-4	204-658-1	n-butyl acetate	10 - 20	Flam. Liq. 3, H226 / STOT SE 3, H336
107-98-2	203-539-1	1-methoxy-2-propanol	5 - 10	Flam. Liq. 3, H226 / STOT SE 3, H336 / Acute Tox. 4, H312

REACH

CAS No	Name	REACH registration number
67-64-1	acetone	01-2119471330-49
108-94-1	cyclohexanone	01-2119453616-35
112-34-5	2-(2-butoxyethoxy)ethanol	01-2119475104-44
115-10-6	dimethylether	01-2119472128-37
123-86-4	n-butyl acetate	01-2119485493-29
107-98-2	1-methoxy-2-propanol	01-2119457435-35

Labelling for contents according to regulation (EC) No 648/2004, annex VII

less than 5 % non-ionic surfactants, preservative, METHYLCHLOROISOTHIAZOLINONE, METHYLISOTHIAZOLINONE
 less than 5 % aromatic hydrocarbons

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

Remove moisted 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.

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.

Medical treatment.

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

Alcohol-resistant foam

Dry powder

Carbon dioxide

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

May lead to formation of explosive/easily ignitable vapour air mixtures.

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.

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****For non-emergency personnel**

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.

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).

Disposal according to regulations.

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, 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.

Vapours can form an explosive mixture with air.

Take precautionary measures against static discharges.

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

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

Advice on storage compatibility

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).

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
67-64-1	Acetone	8 hours	1210	500	EH40/2005
		Short-term	3620	1500	
108-94-1	Cyclohexanone	8 hours		10	EH40/2005
		Short-term		20	
115-10-6	Dimethyl ether	8 hours	766	400	EH40/2005
		Short-term	958	500	
107-98-2	1 -Methoxypropan-2-ol	8 hours	375	100	EH40/2005
		Short-term	560	150	

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
107-98-2	1-methoxy-2-propanol	8 hours	375	100	skin
		Short-term	568	150	
108-94-1	cyclohexanone	8 hours	40,8	10	skin
		Short-term	81,6	20	
112-34-5	2-(2-butoxyethoxy)ethanol	8 hours	67,5	10	
		Short-term	101,2	15	
115-10-6	dimethylether	8 hours	1920	1000	
67-64-1	acetone	8 hours	1210	500	

DNEL-/PNEC-values
DNEL worker

CAS No	Substance name	Value	Code	Remark
112-34-5	2-(2-butoxyethoxy)ethanol	67,5 mg/m3	DNEL acute inhalative (local)	
		101,2 mg/m3	DNEL acute inhalative (local)	
		20 mg/kg	DNEL long-term dermal (systemic)	
115-10-6	dimethylether	1894 mg/m3	DNEL long-term inhalative (systemic)	
123-86-4	n-butyl acetate	11 mg/kg	DNEL acute dermal, short-term (systemic)	
		11 mg/kg	DNEL long-term dermal (systemic)	
		2 mg/kg	DNEL short-term oral (acute)	

DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		300 mg/m ³	DNEL long-term inhalative (local)	
		960 mg/m ³	DNEL acute inhalative (systemic)	
		600 mg/m ³	DNEL acute inhalative (local)	
		480 mg/m ³	DNEL long-term inhalative (systemic)	
67-64-1	acetone	186 mg/kg	DNEL long-term dermal (systemic)	
		1210 mg/m ³	DNEL long-term inhalative (systemic)	
		2420 mg/m ³	DNEL acute inhalative (local)	

PNEC

CAS No	Substance name	Value	Code	Remark
123-86-4	n-butyl acetate	0,18 mg/l	PNEC aquatic, freshwater	
		0,981 mg/kg	PNEC sediment, freshwater	
		0,018 mg/l	PNEC aquatic, marine water	
67-64-1	acetone	10,6 mg/l	PNEC aquatic, freshwater	
		30,4 mg/kg	PNEC sediment, freshwater	
		1,06 mg/l	PNEC aquatic, marine water	
		3,04 mg/kg	PNEC sediment, marine water	

! Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls
Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Short term: filter apparatus, filter AX

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]: 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
pink

Odour
like acetone

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	not applicable				
Flash point	not applicable				Aerosol
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 200 °C				
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	0,767 g/cm ³	20 °C			
Vapour density	not determined				
Solubility in water					No or low immiscibility
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				
Solvent content	96,4 %				
Water content	1,7 %				

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.

10.5. Incompatible materials**Substances to avoid**

No hazardous reactions known.

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****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
LD50 acute oral	51233 mg/kg			ATE
LD50 acute dermal	31635 mg/kg			ATE
LC50 acute inhalation	100 mg/l (4 h)	rat		ATE
Skin irritation	non-irritant			
Eye irritation	irritant			
Skin sensitization	non-sensitizing			

! Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

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****Ecotoxicological effects**

	Value	Species	Method	Validation
Daphnia	EC50 8800 mg/l (48 h)	Daphnia magna		Acetone

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

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*

16 05 04*

Name of waste

packaging containing residues of or contaminated by hazardous substances

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.

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

! SECTION 15: Regulatory information

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

VOC standard
VOC content 96,4 %
VOC value 740,1 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: 8.4

H220 Extremely flammable gas.
 H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H312 Harmful in contact with skin.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H336 May cause drowsiness or dizziness.