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

1.1. Product identifier

Name of product

RIEGLER Leak detection spray / 400 ml
Code-Nr. R3200/400 / ID-Nr. 114570

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
Aerosol 3	**H229**	

Hazard Statements

H229 Pressurised container: May burst if heated.

2.2. Label elements

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

Signal word
Warning

Hazard Statements

H229 Pressurised container: May burst if heated.

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.

P251 Do not pierce or burn, even after use.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

2.3. Other hazards
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
Leak Detection Spray basing on aqueous tenside solution; without solvents.

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
10024-97-2	**233-032-0**	**nitrous oxide**	**0,1 < 2,5**	**Ox. Gas 1, H270 / Press. Gas, H280**
137-16-6	**205-281-5**	**Natrium-N-Lauroylsarkosinat**	**< 0,35**	**Acute Tox. 2, H330 / Eye Dam. 1, H318 / Skin Irrit. 2, H315**

REACH

CAS No	Name	REACH registration number
10024-97-2	nitrous oxide	01-2119970538-25
137-16-6	Natrium-N-Lauroylsarkosinat	01-2119527780-39

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
Take affected person into fresh air.
Do not leave casualty unattended.

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 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.
If swallowed seek medical advice immediately and show the doctor packing or label.
Rinse out mouth thoroughly with water.

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
Product does not burn, fire-extinguishing activities according to surrounding.

5.2. Special hazards arising from the substance or mixture
Danger of bursting
Risk of formation of toxic pyrolyse products.

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.
High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions
No information available.

6.3. Methods and material for containment and cleaning up
Flush away residues with hot water.

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
No special measures necessary if used correctly.

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.

Advice on protection against fire and explosion
Pressurized container.
Do not pierce or burn even after use.
The product is not combustible.

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 food.

Further information on storage conditions
Protect from frost.
Protect from direct solar radiation.
Protect from heat and direct solar radiation.
Storage temperature may not exceed 50°C (=122°F).
Keep in a cool place, heat causes increase in pressure and risk of bursting.

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
10024-97-2	Nitrous oxide	8 hours	183	100	EH40/2005

! **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.
Glove material specification [make/type, thickness, permeation time/life, wetting resistance]:: Nitrile rubber; 0,4mm; 480min;60min.
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.

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	Colour	Odour
aerosol	colourless	characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	7,5 - 8	20 °C			
boiling point	100 °C				
melting point	0 °C				
Flash point	not applicable				Aerosol
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not applicable				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	5,5 - 7 bar	20 °C			
Relative density	ca. 1 g/cm3	20 °C			
Vapour density	not determined				
Solubility in water					miscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				
Solvent content	0 %				
Water content	> 98 %				

Oxidising properties
No information available.

Explosive properties
No information available.

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
Hazardous decomposition products
Hydrofluoric acid

10.4. Conditions to avoid
Keep away from heat.
Heating above 50°C

10.5. Incompatible materials
Substances to avoid
Risk of bursting at temperatures above 50°C due to a pressure increase inside the container. Heating causes the pressure to increase. Risk of bursting through overheating.

10.6. Hazardous decomposition products
fluoric containing products

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
LC50 acute inhalation	0,5 mg/l (4 h)	rat		CAS: 137-16-6
Skin irritation	No stimulation effect.			
Eye irritation	low irritant - no labeling duty			
Skin sensitization	non-sensitizing			

Experiences made from practice
According to our experience and current information, the product has no detrimental effects on health if handled and used correctly

Additional information
The product is to be handled with the caution usual with chemicals.
Other hazardous properties may not be excluded.
No toxical dates available.

! SECTION 12: Ecological information

12.1. Toxicity
No information available.

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
Because of its consistency the product cannot be dispersed in the environment. Adverse ecological effects are therefore unlikely on the basis of current knowledge.

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
Behaviour in sewage plant
When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

Additional ecological information

	Value	Method	Remark
AOX	Product can contain organically bound halogen and contribute to the adsorbable organic halogen value.		

! **General regulation**
Ecological dates are not available.
Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	**Name of waste**
16 05 04*	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

	ADR/RID	IMDG	IATA-DGR
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, non-flammable
14.3. Transport hazard class(es)	2.2	2.2	2.2
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) 2.2
tunnel restriction code E
Classification code 5A
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 0 %

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

H270 May cause or intensify fire; oxidiser.
H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H330 Fatal if inhaled.