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1. Section 1. Identification of the substance/mixture and of the company/undertaking:

- 1.1. Product identifier : **ANTI-RODENT SPRAY-R 30299**
- 1.2. Relevant identified uses of the substance or mixture and uses advised against: Spray against martens and rodents
- 1.3. Details of the supplier of the safety data sheet
Identification of manufacturer/Supplier:
RETECH, s.r.o.
Vackova 1541/4
150 00 Praha-5 Stodůlky
Telephone/Fax: +420 327 596 128, +420 327 596 428
Information: info@retech.cz
- 1.4. Emergency telephone number:
RETECH Suchdol 212, Suchdol u Kutné Hory
Tel.+420 327 596 128 (7.30-16.00 hour)
Toxicology information number, Na bojišti 1, 128 08 PRAHA 2
Tel. +420 224 919 293, +420 224 915 402 (24 hours a day)

2. Section 2. Hazard identification:

- The product is labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
The classification is in line with current EC lists, It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- 2.1. Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008:
Flam. Aerosol 1 H222 Extremely flammable aerosol.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC:
F+ Extremely flammable R12 Extremely flammable
- 2.2. Label elements:
Labelling according to Regulation (EC) No 1272/2008:
GHS02

DANGER
H222 Extremely flammable aerosol.
- Labelling according to Directive 1999/45/EC:
F+

Extremely flammable
R 12 Extremely flammable.
- Special labeling of certain preparations:
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition.- No smoking.
Keep out of the reach of children.
- 2.3. Other hazards:
Results of PBT and vPvB assessment:

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PBT: Not applicable
vPvB: Not applicable
Buildup of explosive mixtures possible without sufficient ventilation.

3. Section 3. Composition/information on ingredients:

3.2. Mixtures:

Description: The active ingredient in propellants

Dangerous components:

CAS: 64-17-5 EINECS: 200-578-6	Ethanol F R11 GHS02 Flam.Liq.2, H225	50-100%
CAS: 106-97-8 EINECS: 203-448-7	Butane (containing <0,1% butadiene (203-450-8)) F+ R12 GHS02 Flam. Gas 1, H220; GHS04 Press. Gas, H280	25-<50%
CAS: 74-98-6 EINECS: 200-827-9	Propane F+ R12 GHS02 Flam. Gas 1, H220; GHS04 Press. Gas, H280	10-<25%
CAS: 67-63-0 EINECS: 200-661-7	Propan-2-ol F R 11; Xi R36; R67 GHS02 Flam. Liq. 2, H225; GHS07 Eye Irrit. 2, H319; STOT SE 3, H336	2.5-<10%

Additional information: For the wording of the listed risk phrases refer to section 16.

4. Section 4. First aid measures:

4.1. Description of first aid measures:

After inhalation: Supply fresh air; consult doctor in case of symptoms.
After skin contact: Remove soaked clothing, wash skin with water and soap.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
After swallowing: Rinse mouth; Do not induce vomiting; Consult a physician.
Most important symptoms and effects, both acute and delayed: No further relevant information available.
Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Section 5. Fire fighting measures:

5.1. Extinguishing media:

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with a full water jet.

5.2. Special hazards arising from the substance or mixture:

Information not available.

5.3. Advice for firefighters:

Wear protective equipment/clothing when fighting fires.
Aerosols may explode when overheated.
Cool the container with water.

6. Section 6. Accidental release measures:

6.1. Personal precautions, protective equipment and emergency procedures:

Wear protective equipment see Section 8.2. Ensure adequate ventilation, keep away from ignition sources. Keep unprotected persons away.

6.2. Environmental precautions:

Do not allow to enter drainage system, surface or ground water.

6.3. Methods and material for containment and cleaning up:

Ensure adequate ventilation.

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<p>Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13.</p>		
6.4.	Reference to other sections: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment See Section 13 for disposal information.	
7.	Section 7. Handling and storage:	
7.1.	Information for safe handling: Information about protection against explosions and fires:	Keep away from heat and direct sunlight. Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
7.2.	Conditions for safe handling, including any incompatibilities: Requirements to be met by storerooms and containers: Information about storage in one common storage facility: Further information about storage conditions:	Observe official regulations on storing packaging with pressurized containers. Store in cool, dry location. Protect from heat and direct sunlight. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
7.3.	Specific end use(s): No further relevant information available.	
8.	Section 8. Exposure controls and personal protection:	
8.1	Control parameters: Components with limit values that require monitoring at the workplace: 106-97-8 butane (containing < 0.1% butadiene (203-450-8)) WEL Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene) 74-98-6 Propane WEL Short-term value: 3600 mg/cm ³ , 2000 ppm Long-term value: 1800 mg/m ³ , 1000 ppm 64-17-5 Ethanol WEL Long-term value: 1920 mg/m ³ , 1000 ppm 67-63-0 Propan-2-ol WEL Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm DNELs 67-63-0 propan-2-ol Oral DNEL 26 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten) Dermal DNEL 319 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten) 888 mg/kg bw/day (Worker) (Chronische Blootstelling, Systeem Effecten) Inhalative DNEL 89 mg/m ³ (Consumer) (Chronische Blootstelling, Systeem Effecten) 500 mg/m ³ (Worker) (Chronische Blootstelling, Systeem Effecten) Additional information: The lists that were valid during the compilation were as basis.	
8.2	Exposure controls: Eye protection: Breathing equipment: Protection of hands:	Tightly sealed safety glasses. In case of brief exposure or low pollution use respiratory filter device-filter AX/P2. In case of intensive or longer exposure use self-contained respiratory protective device. Solvent resistant gloves. Selection of glove material on consideration of the penetration times, rates of

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- diffusion and the degradation
Material of gloves: Nitrile rubber, NBR
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Protective working clothing.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands during breaks and at the end of the work.
Do not inhale gases/fumes/aerosols.
- 8.3. Protection of skin:
General protective and hygienic measures:

9. Section 9. Physical and chemical properties:

9.1. Information on basic physical and chemical properties:

Appearance:

- form: Aerosol
colour: According to product specification
Odour threshold: Characteristic
Value pH: Not determined
Melting point/freezing point: Not determined
Initial boiling point/boiling range: -44°C
Flash point: -97°C
Evaporation rate: Not determined
Flammability (solid,gas): Not determined
Ignition temperature: 365°C
Explosive properties: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Upper/lower flammability or explosive limits:

- Explosion limits: lower (% Vol): 1.5%
upper (% Vol): 15%
Vapour pressure (at 20°C): 4.0 Bar
Vapour density (at 20 °C): Not determined
Relative density: 0.68 g/cm³
Solubility in/miscibility with
- water Not miscible or difficult to mix
Partition coefficient (n-octanol/water): Not determined
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: Not determined
Oxidative properties: Not determined

9.2. Other information:

- Organic solvents: 97,3%
Solids content: 2.5%
VOC: 661.9 g/l

10. Section 10. Stability and reactivity:

- 10.1. Reactivity: No further relevant information available.
10.2. Chemical stability: No further relevant information available.
10.3. Possibility of hazardous reactions: No dangerous reactions known.
10.4. Conditions to avoid: There are known no conditions to avoid.
10.5. Incompatible materials: No further relevant information available.
10.6. Hazardous products of decomposition: No dangerous decomposition products known.

11. Section 11. Toxicological information:

11.1 Information on toxicological effects:

- Acute toxicity:
67-63-0 Propan-2-ol

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Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	13900 mg/kg (rab)
Inhalative	LC50/6h	25000 mg/l (rat)
Irritation: on the skin:		No irritant effect.
on the eye:		No irritating effect.
Corrosivity:		Not corrosive.
Sensitization:		No sensitizing effect known.
Repeated dose toxicity:		No further relevant information available.
Carcinogenicity:		No further relevant information available.
Mutagenicity:		No further relevant information available.
Toxicity for reproduction:		No further relevant information available.
Other information:		No data.

12. Section 12. Ecological information:

- 12.1. Toxicity:
Ecotoxicological effects:
Aquatic toxicity:
67-63-0 Propan-2-ol
LC50 (24h) 9714 mg/l (Daphnia magna)
LC50/96h 9640 mg/l (Pimephales promelas)
LOEC (8 days) 1000 mg/l (algae)
Water hazard class: 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- 12.1. Toxicity: No further relevant information available.
12.2. Persistence and degradability: Easily biodegradable
12.3. Bioaccumulative potential: No further relevant information available.
12.4. Mobility in soil: No further relevant information available.
12.5. Results of PBT and vPvB assessment:
PBT: Not applicable
vPvB: Not applicable
12.6. Other adverse effects: No further relevant information available.

13. Section 13. Disposal considerations:

- 13.1 Waste treatment methods:
Product: Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Uncleaned packagings: Disposal must be made according to official regulations.

14. Section 14. Transport information:

- 14.1. Land transport:
ADR/RID-GGVS/E class: 2 5F Gases
Danger code (Kemler): -
Packaging group -
Hazard label: 2.1
Number UN: 1950
Limited quantities (LQ) LQ2 1L
Transport category 2
Tunnel restriction code D
Description of goods: Aerosols
- 14.2. Maritime transport:
IMDG-class: 2.1
Page: -
Number UN: 1950
Label: 2.1
Packaging group: -
EMS-group: F-D,S-U

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Marine pollutant:	No
Proper shipping name:	AEROSOLS
14.3. Air transport:	
ICAO / IATA -class:	2.1
UN/ID number:	1950
Label:	2.1
Packaging group:	-
Proper shipping name:	AEROSOLS, flammable
UN "Model Regulation":	UN1950; AEROSOLS; 2.1
Special precautions for users - Warning:	Gases
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not applicable

15. Section 15. Regulatory information:

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

Labelling according to law line:

The product has been labeled in accordance with EC Directives / relevant national laws.

Danger of determining components and mark to labelling:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition.-

No smoking.

Dispose of container and collection of hazardous waste.

Labelling hazardousness:

F+



Extremely flammable

Numbers and word reading associated hazard R-sentences :

R 12 Extremely flammable.

Numbers and word reading associated security S-sentences:

S 2 Keep out of reach of children.

S 16 Keep away from sources of ignition – No smoking.

S 23 Do not breathe vapor/aerosol.

S 46 If swallowed, seek medical advice immediately and show this container or label.

S 51 Use only in well-ventilated areas.

On the packaging there is not included info in accordance with European Regulation No 1999/45/EC (chapter 2.5.).

Regulation (EC) No 648/2004/EC Contains: Aliphatic Hydrocarbons, $\geq 30\%$

Density: 0.68 g/cm³

VOC: 661.9 g/l

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Used legislation:

European Regulation (EC) No 1907/2006 – REACH.
Commission Regulation (EU) No 453/2010.
European Regulation No 67/548EEC and 1999/45/EC.
Commission Regulation (EC) No 1272/2006 – CLP.
Commission Regulation (EC) No 790/2009.
Regulation (EC) No 648/2004 (detergents).

National regulations:

Danish MAL Code 3-1

15.2. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Section 16. Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relative R+H phrases:

R 11 Highly flammable.
R 12 Extremely flammable
R 36 Irritating to eyes.
R 67 Vapours may cause drowsiness and dizziness.
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
WEL- Workplace exposure limits
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

***Compared to the last version the data has been changed.**