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

Hazard statements:
H222 Extremely flammable aerosol.

Labelling according to Directive 1999/45/EC:

F+

Extremely flammable

Risk phrases:
R12 Extremely flammable.

Safety phrases:
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.
According to 1907/2006 EEC (REACH), Article 31

Date of issue: 16.04.2011  Reviewed on: 22.11.2011

Trade name: ANTI-RODENT SPRAY  Version: 2.0

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.).

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.
Dispose of container and collection of hazardous waste.
Regulation (EC) No 648/2004/EC: Aliphatic Hydrocarbons, ≥30%

2.3. Other hazards:
Results of PBT and vPvB assessment:
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:

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

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. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13.

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: Observe official regulations on storing packaging with pressurized containers.

Information about storage in one common storage facility: 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:

<table>
<thead>
<tr>
<th>Component</th>
<th>WEL Short-term Value</th>
<th>WEL Long-term Value</th>
<th>DNELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-97-8 butane (containing &lt; 0.1% butadiene (203-450-8))</td>
<td>1810 mg/m³, 750 ppm</td>
<td>1450 mg/m³, 600 ppm</td>
<td>Propan-2-ol Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>74-98-6 Propane</td>
<td>3600 mg/cm³, 2000 ppm</td>
<td>1800 mg/m³, 1000 ppm</td>
<td>Propan-2-ol Long-term value: 600 mg/m³, 240 ppm</td>
</tr>
<tr>
<td>64-17-5 Ethanol</td>
<td>Short-term value: 1920 mg/m³, 1000 ppm</td>
<td>Long-term value: 1200 mg/m³, 500 ppm</td>
<td>Propan-2-ol Long-term value: 999 mg/m³, 400 ppm</td>
</tr>
</tbody>
</table>
Oral  DNEL  26 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)
Dermal DNEL  319 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)
Inhalative DNEL  89 mg/m³ (Consumer) (Chronische Blootstelling, Systeem Effecten)

Additional information: The lists that were valid during the compilation were as basis.

8.2 Exposure controls:
Eye protection: Tightly sealed safety glasses.
Breathing equipment: 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.
Protection of hands: Solvent resistant gloves.
Selection of glove material on consideration of the penetration times, rates of 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.
Protection of skin: Protective working clothing.

8.3. General protective and hygienic measures:
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.

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: -44°C
Initial boiling point/boiling range: -97°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
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:
Acute 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): Not determined
Packaging group: Not determined
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: Not determined
Number UN: 1950
Label: 2.1
Packaging group: Not determined
EMS-group: F-D,S-U
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: Not determined
Proper shipping name: AEROSOLS, flammable
UN "Model Regulation": UN1950; AEROSOLS; 2.1
Special precautions for users - Waring: Gases
Transport in bulk according to Annex II of MARPOL73/78 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:

Used legislation:
European Regulation (EC) No 1907/2006 – REACH.
European Regulation No 67/548EEC and 1999/45/EC.

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

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