

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

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

- **1.1 Product identifier**
- **Trade name:** RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours
- **Article number:**
VSP-001, VSP-002, VSP-003, VSP-004, VSP-005, VSP-006, VSP-008, VSP-011, VSP-012, VSP-013, VSP-014, VSP-015, VSP-016, VSP-018, VSP-21, VSP-22, VSP-23, VSP-24, VSP-25, VSP-26, VSP-28
- **1.2 Relevant identified uses of the substance or mixture and uses advised against --**
- **Application of the substance / the preparation** Marking of cattle and pigs
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Raidex GmbH
Neuhäuser Str. 17
D-72581 Dettingen / Erms
Tel.: +49 7123 9751 0
Fax: +49 7213 9751 33
msds@raidex.de
- **Further information obtainable from:** Department Product Safety
- **1.4 Emergency telephone number:**
Tel.: +49 7123 9751 0
Fax: +49 7123 9751 33
(Mo - Do 08:00 - 16:00 Uhr, Fr 08:00 - 12:00 Uhr)

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

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.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



F+ Extremely flammable

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 1)

· **Risk phrases:**

12 Extremely flammable.

· **Safety phrases:**

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

23 Do not breathe spray.

24/25 Avoid contact with skin and eyes.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

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

51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (e.g. in the car). Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

· **Classification in accordance with Directive 75/324/EEC: Extremely flammable**

· **Additional information:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (e.g. in the car). 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.

Buildup of explosive mixtures possible without sufficient ventilation.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.









· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43	ethanol  F R11  Flam. Liq. 2, H225	75-≤100%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	5-<10%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	5-<10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	2.5-<5.0%

· **Additional information:**

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1 67/548 EU), so the classification as carcinogen need not to apply.

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

4 First aid measures

· **4.1 Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 2)

- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters -**

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Storage class:** 2B
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 3)

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

WEL () Long-term value: 1920 mg/m³, 1000 ppm

106-97-8 butane

WEL () Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

Solvent resistant gloves

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Butyl rubber, BR

· **Penetration time of glove material**

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min

Butyl acetate: 60 min

Ethyl acetate: 170 min

Xylene: 42 min

· **Eye protection:** Safety glasses

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: According to product specification

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

· **Flash point:** Not applicable, as aerosol.

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 4)

· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	In use, may form flammable/explosive vapour-air mixture.
· Explosion limits:	
Lower:	3.5 Vol %
Upper:	15.0 Vol %
· Vapour pressure at 20 °C:	59 hPa
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC-(EU)	---
	991.3 g/l
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Vapours have narcotic effect.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 5)

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **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 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
15 01 04	metallic packaging

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 2 5F Gases.
- **Label** 2.1

- **IMDG, IATA**



- **Class** 2.1
- **Label** 2.1

- **14.4 Packing group**
- **ADR, IMDG, IATA** Void

- **14.5 Environmental hazards:**

- **Marine pollutant:** No

- **14.6 Special precautions for user** Warning: Gases.
- **Danger code (Kemler):** -

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.03.2013

Version number 3

Revision: 18.03.2013

Trade name: RAIDEX Marking-Spray for cattle and pigs 200ml, 400ml, 500ml all colours

(Contd. of page 6)

· EMS Number:	F-D,S-U
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture .**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.

R11 Highly flammable.

R12 Extremely flammable.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

GB