

Material Safety Data Sheet

According to 91/155 EEC(2001/58 EC)

Printing date: 10.05.2006

Reviewed on: 10.05.2006

1 Identification of substance:

- **Product details:**

- **Trade name:** **Spray for marking of animals (aerosol) orange**

- **Application of the substance / the preparation** Marking of animals

- **Supplier/Manufacturer:**

Raidex GmbH
Neuhäuser Str. 17
72581 Dettingen/Erms
Germany
Tel.: +49-7123-9751-0
Fax: +49-7123-9751-33

- **Information department:** see above

- **Emergency information:** National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Composition/Data on components:

- **Chemical characterization**

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

- **Dangerous components:**

CAS: 64-17-5 ethanol	50-100%
EINECS: 200-578-6 F; R 11	
CAS: 67-63-0 propan-2-ol	10-25%
EINECS: 200-661-7 Xi, F; R 11-36-67	
CAS: 74-98-6 propane liquefied	10-25%
EINECS: 200-827-9 F+; R 12	
CAS: 106-97-8 butane, pure	2.5-10%
EINECS: 203-448-7 F+; R 12	
CAS: 1495-54-5 4-(phenylazo)benzene-1,3-diamine	< 2.5%
EINECS: 207-803-7 Xi; R 36/37/38	
CAS: 100-51-6 Benzyl alcohol	< 2.5%
EINECS: 202-859-9 Xn; R 20/22	

3 Hazards identification

- **Hazard description:**



F+ Extremely flammable

- **Information pertaining to particular dangers for man and environment:**

Warning! Pressurized container.

R 12 Extremely flammable.

R 67 Vapours may cause drowsiness and dizziness.

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

95.0 % by mass of the contents are flammable

Keep out of the reach of children

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

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4 First aid measures

- **General information:** If symptoms persist or in case of doubt seek medical advice.
- **After inhalation:**
Supply fresh air and be sure to call for a doctor.
In case of unconsciousness, place patients on their side in a stable position for transportation.
- **After skin contact:** Wash with water.
- **After eye contact:**
Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult a doctor or better an eye specialist.
- **After swallowing:**
Unintentional swallowing is not very likely in the industrial area. If product is ingested:
Rinse out mouth and then drink plenty of water.
Never give anything by mouth to a unconscious person.
Consult a physician and show this safety data sheet.
- **Information for doctor:**
- **The following symptoms may occur:**
After inhalation of high concentrations:
Headache
Nausea
Dizziness
Lassitude
Unconsciousness
After swallowing:
Irritation of mucuous membranes
Vomiting
Gastric or intestinal disorders.
- **Treatment:** Symptomatic treatment

5 Fire fighting measures

- **Suitable extinguishing agents:**
Fire-extinguishing powder
Carbon dioxide (CO₂)
- **For safety reasons unsuitable extinguishing agents:**
Water
Direct jet water
- **Special hazards caused by the material, its products of combustion or resulting gases:** No hazards known
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information:**
Heating leads to pressure increase entailing danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.



Wear protective equipment. Keep unprotected persons away.

Avid contact with eyes and skin.

Do not smoke - keep ignition sources away

- **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

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· **Measures for cleaning/collecting:**

- Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents
- Absorb with non-combustible material like sand, soil or diatomite.
- Send for recovery or disposal in suitable receptacles.
- Dispose contaminated material as waste according to item 13.

7 Handling and storage

· **Handling**

· **Information for safe handling:**

- Open and handle receptacle with care.
- Ensure good ventilation/exhaustion at the workplace.
- Avoid contact with eyes and skin.
- Avoid inhalation of vapours.

· **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

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

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

· **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:**

- Store away from foodstuffs.
- Store away from feed.

· **Further information about storage conditions:**

- Store receptacle in a well ventilated area.
- Protect from heat and direct sunlight.
- Protect from frost.

8 Exposure controls and personal protection

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

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

64-17-5 ethanol

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

67-63-0 propan-2-ol

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppm
Long-term value: 999 mg/m³, 400 ppm

106-97-8 butane, pure

WEL (Great Britain) Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm

· **Personal protective equipment**

· **General protective and hygienic measures:**

- The usual precautionary measures should be adhered to when handling chemicals.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.
- Do not eat or drink while working.
- Use skin protection cream for skin protection.
- Wash hands before breaks and at the end of work.

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- **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

Short term filter device:

Filter A

- **Protection of hands:**

Chemical resistant gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **Material of gloves:**

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material:**

The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

Form:	Aerosol
Colour:	Orange
Odour:	Characteristic

- **Change in condition:**

Melting point/Melting range: undetermined

Boiling point/Boiling range: Not applicable, as aerosol

- **Flash point:** Not applicable, as aerosol

- **Self igniting:** Product is not self-igniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Density:** Not determined

- **Solubility in / Miscibility with**

Water: Not determined

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

Conditions to be avoided: see chapter 7

- **Dangerous reactions:** No dangerous reactions known

- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:** No toxicity data are available for the product itself.

- **Primary irritant effect:**

· **on the skin:** May cause irritation to the skin.

· **on the eye:** May cause irritation to the eyes.

· **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Irritant

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12 Ecological information

- **Ecotoxicological effects:**
 - **Aquatic toxicity:** Presently there are no ecotoxicological values available.
 - **General notes:**
Follow producer's instructions for use.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
-

13 Disposal considerations

- **Product:**
- **Recommendation:**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

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

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **UN-Number:** 1950
- **Label:** 2.1
- **Description of goods:** 1950 AEROSOLS
- **Remarks:** Limited Quantity: 1 l inner packing, 30 l packing unit

- **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1

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- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable
- **Remarks:** Packing Instructions:
For Limited Quantities: Y203(Max Net Qty/Pkg: 30 kg G)
Passenger and Cargo Aircraft: 203 (Max Net Qty/Pkg: 75 kg)
Cargo Aircraft only: 203 (Max Net Qty/Pkg: 150 kg)

15 Regulations

- **Markings according to EC 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

- **Risk phrases:**
12 Extremely flammable.
67 Vapours may cause drowsiness and dizziness.
- **Safety phrases:**
37 Keep container tightly closed in a cool place.
9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
33 Take precautionary measures against static discharges.
43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.
- **Special labelling 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.
95.0 % by mass of the contents are flammable
Keep out of the reach of children
- **National regulations**
- **Information about limitation of use:** Restrictions on juvenile employment must be observed.

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 R-phrases:**
11 Highly flammable.
12 Extremely flammable.
20/22 Harmful by inhalation and if swallowed.
36 Irritating to eyes.
36/37/38 Irritating to eyes, respiratory system and skin.
67 Vapours may cause drowsiness and dizziness.
- **Department issuing MSDS:**
KFT-Chemieservice Marienstr. 3 D-64347 Griesheim
Postfach 1451 D-64345 Griesheim
Tel.: +49-6155-823241 Fax: +49-6155-823246
- **Contact:** Angelika Torges