Material Safety Data Sheet
According to 91/155 EC

Printing date: 25.09.2006
Revised date: 12.03.2008

Trade name: Silkospray

1 Identification of substance:

- Product details:
  - Trade name: Silkospray

- Article number: 556000 000000
  - Application of the substance / the preparation Coating

- Manufacturer/Supplier:
  Willy Rüsch GmbH
  Willy -Rüsch-Straße 4 - 10
  71394 Kernen
  Tel.: 07151 / 406-0
  Fax.: 07151 / 406-150

2 Composition/Data on components:

- Chemical characterization
  - Description: Spray

- Dangerous components:
  - CAS: 106-97-8 Butane > 50%
  - F+ ; R 12

3 Hazards identification

- Human Health Hazards:
  Prolonged exposure to vapour concentrations above the recommended occupational exposure standard may cause headache, dizziness, nausea, confusion, blurred vision, asphyxiation, cardiac irregularities, unconsciousness and even death. Direct contact of the skin with liquid gas cause frostbite or cold burns.

Safety hazards:
Extremely flammable

4 First aid measures

- After inhalation: Supply fresh air; consult doctor in case of symptoms.
- After skin contact: The product is generally no skin irritant.
- After eye contact: Rinse opened eye for several minutes under running water.

5 Fire fighting measures

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.
- Protective equipment: No special measures required.

(Contd. on page 2)
6 Accident release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:
  - Prevent material from reaching sewage system, holes and cellars.
  - Measures for cleaning/collection:
    Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
    Ensure adequate ventilation.

7 Handling and storage

- Handling
  - Information for safe handling: handle container with care.
  - Information about protection against explosions and fires: Keep ignition sources away – Do not smoke.
- Storage
  - Requirements to be met by storerooms and containers. Store in cool location.
  - Information about storage in one common storage facility: Store away from oxidizing agents.
  - Further information about storage conditions:
    Store in cool, dry conditions in well sealed containers.
    Protect from heat and direct sunlight.

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:

  106-97-8 butane, pure
  OES 1.000 ppm

- Additional information: The lists that were valid during the compilation were used as basis.
- Personal protective equipment
  - General protective and hygienic measures:
    Keep away from foodstuffs and beverages.
    Wash hands during breaks and the end of the work.
    Breathing equipment: Use breathing protection in case of insufficient ventilation.
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product.
    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 the suitable gloves does not only depend on the material, but also on further marks of quality and varies 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Tightly sealed safety glasses

9 Physical and chemical properties:

- General information
  Form: Aerosol
  Colour: Colourless
  Odour: Characteristic
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(contd. of page 2)

Change in condition
Melting point/Melting range: not applicable
Boiling point/Boiling range: not applicable

Flash point: -80° C (for Butane)

Ignition temperature: 400° C (for Butane)

Self-inflammability: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Critical values for explosion:
Lower: 1,5 Vol %
Upper: 9,5 Vol %

Vapour pressure at 20° C: 3,8 bar

Density: 0,60 g / cm³

Solubility in / Miscibility with
Water: Unsoluble
Organicsolvents: 0,0 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: Can react violently with oxygen rich (oxidizing) material.

Dangerous products of decomposition: Inflammable gases/vapours

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin: No available information. Frostbite because of the liquid product.

on the eye: Irritant effect

Sensitization: No sensitizing effect known.

Additional toxicological information:

Human effects:

Under normal conditions of use the product is not hazardous; however, abuse involving deliberate inhalation of very high concentration of vapour, even for short periods, can produce unconsciousness and/or result in a sudden fatality.

12 Ecological information:

General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water.

13 Disposal considerations

Product:

Recommendation

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

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

(Contd. on page4)
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### 14 Transport information

#### Land transport ADR/RID (cross-border)
- **ARD/RID-GGVS/E Class:** 2 5F Gases
- **UN-Number:** 1950
- **Designation of goods:** 1950 Aerosol, limited quantity

#### Maritime transport IMDG:
- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Packaging group:** II
- **EMS Number:** F-D, S-U
- **Correct technical name:** AEROSOLS, containing Butane

**Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Pkg Notes**
  - pass 203/75 kg
  - cargo 203/150 kg
- **Correct technical name:** AEROSOLS, flammable / Containing Butane

### 15 Regulatory information

#### Designation according to EC guidelines:
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

- 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. Without adequate ventilation formation of explosive mixtures may be possible.

- **Code Letter and hazard designation of product:**
  - F+ Extremely flammable

Hazard-determining components of labelling: entaromatisierter Kohlenwasserstoff

**Risk phrases:**
- 12 Extremely flammable.

**Safety phrases:**
- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition – No smoking.

(Contd. on page 5)
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National regulations

Technical instructions (air):
Class Share in %
III 100.0

Water hazard class: Water hazard class 1: slightly hazardous for water.

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.

Relevant R-phrases
12 Extremely flammable.

(GB)