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

- Product details
- Trade name: **ZEP SMOKE SCREEN AEROSOL**
- Article number: A70 USA
- Application of the substance / the preparation: **Masking material**
- Manufacturer/Supplier:
  ZEP ITALIA s.r.l.
  Via Nettunense Km. 25.000
  IT-04011 APRILIA (LT)
  Tel. +39.06926691 / Fax. +39.06.92747061
  sito: www.zepitalia.it
- Further information obtainable from: Technical products department
- Information in case of emergency:
  Italia: Centro Antiveieni Ospedale Niguarda Milano Tel. 02.66101029

2 Composition/information on ingredients

- Chemical characterization
- Description: Mixture of substances listed below with nonhazardous additions.
- Dangerous components:
  - CAS: 64742-47-8  Distillates (petroleum), hydrotreated light  Xn; R 65-66  10-25%
    EINECS: 265-149-8
  - CAS: 106-97-8  butane  F+; R 12  10-25%
    EINECS: 203-448-7
  - CAS: 74-98-6  propane  F+; R 12  10-25%
    EINECS: 200-827-9
- Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- Hazard description:
  - F+ 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.
  R 12 Extremely flammable.
  Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
  48.0 % by mass of the contents are flammable
  Keep out of the reach of children

- Classification system:
  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
4 First aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- 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: If symptoms persist consult doctor.

5 Fire-fighting measures

- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Do not allow to enter sewers/surface or ground water.
- Measures for cleaning/collecting: Ensure adequate ventilation.

7 Handling and storage

- Handling:
  - Information for safe handling: Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
  - Information about fire - and explosion protection: Do not spray onto a naked flame or any incandescent material. 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.
- 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: Keep container tightly sealed. Do not seal receptacle gas tight. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:
  - 106-97-8 butane
    - WEL: Short-term value: 1810 mg/m³, 750 ppm
    - Long-term value: 1450 mg/m³, 600 ppm

(Contd. on page 3)
Material Safety Data Sheet
According to 91/155 EEC

Printing date 30.03.2006
Reviewed on 30.03.2006

Trade name: ZEP SMOKE SCREEN AEROSOL

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

- 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:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  Use suitable respiratory protective device in case of insufficient ventilation.

- Protection of hands:
  Protective 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 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 goggles

9 Physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
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<tbody>
<tr>
<td><strong>Form:</strong></td>
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<tr>
<td><strong>Colour:</strong></td>
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<td><strong>Odour:</strong></td>
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<tr>
<th>Change in condition</th>
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<tbody>
<tr>
<td><strong>Melting point/Melting range:</strong></td>
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<tr>
<td><strong>Boiling point/Boiling range:</strong></td>
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- Flash point: -45°C
- Ignition temperature: 210.0°C
- Self-igniting: Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
Material Safety Data Sheet
According to 91/155 EEC

Printing date 30.03.2006
Reviewed on 30.03.2006

Trade name: ZEP SMOKE SCREEN AEROSOL

(Contd. of page 3)

- Explosion limits:
  Lower: 0.5 Vol %
  Upper: 10.9 Vol %
- Vapour pressure at 20°C: 8300.0 hPa
- Density at 20°C: 0.900 g/cm³
- Solubility in / Miscibility with water: Partly soluble.
- Solvent content:
  Organic solvents: 33.0 %
  VOC (EC) 33.00 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

12 Ecological information

- General notes:
  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 course or sewage system.

13 Disposal considerations

- Product:
  - Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

(Contd. on page 5)
14 Transport information

- Land transport ADR/RID (cross-border)

  · ADR/RID class: 2 5F Gases.
  · Danger code (Kemler): 23
  · UN-Number: 1950
  · Packaging group: -
  · Hazard label: 2.1
  · Description of goods: 1950 AEROSOLS

- 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
  · Packaging group: -
  · Proper shipping name: AEROSOLS, flammable

15 Regulatory information

- 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

- Risk phrases:
  12 Extremely flammable.

- Safety phrases:
  9 Keep container in a well-ventilated place.
  16 Keep away from sources of ignition - No smoking.
  23 Do not breathe fumes/aerosol.
  24/25 Avoid contact with skin and eyes.
Trade name: ZEP SMOKE SCREEN AEROSOL

33 Take precautionary measures against static discharges.
51 Use only in well-ventilated areas.
60 This material and its container must be disposed of as hazardous waste.
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

- 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.
  48.0 % by mass of the contents are flammable
  Keep out of the reach of children

- National regulations:

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
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<tbody>
<tr>
<td>NK</td>
<td>33.0</td>
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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
  12 Extremely flammable.
  65 Harmful: may cause lung damage if swallowed.
  66 Repeated exposure may cause skin dryness or cracking.

- Department issuing MSDS: Reparto per la protezione dell’ecologia
- Contact: Francesca Vannucci / Alves Costanza