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**GUARDIAN ANGEL®  
MATERIAL SAFETY DATA SHEET**

Effective Date: April 2006

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**I. IDENTIFICATION**

|                                    |  |
|------------------------------------|--|
| Product Name:                      | GUARDIAN ANGEL Jet Protector                                       |
| Chemical Formulation:              | Oleoresin extract of Capsicum Pepper in solution of Benzyl Alcohol |
| Formula:                           | 2 x 6 ml (=12 grams) liquid irritant                               |
| IATA / ICAO Hazard Classification: | None. No special shipping requirements.                            |

**II. INGREDIENTS**

| Material           | CAS       | %  | HAZARD                 |
|--------------------|-----------|----|------------------------|
| Benzyl Alcohol     | 0100-51-6 | 90 | Flammable              |
| Oleoresin Capsicum | 8023-77-6 | 10 | Irritant-Infamatory    |
| (Capsaicine        | 404-86-4  | 2  | Irritant-Inflammatory) |

**III. PHYSICAL DATA**

|   |   |                        |           |
|---|---|------------------------|-----------|
| Boiling point                           | 205°C                                     | Freezing point         | -22°C     |
| Specific gravity (H <sub>2</sub> O = 1) | 1.036 g/cm <sup>3</sup>                   | Melting point          | -22°C     |
| Vapor density (air = 1)                 | 3.72                                      | Vapor pressure at 20°C | 0.05 mbar |
| Per cent volatiles per volume           | 92%                                       | Solubility in water    | 3.6 g/l   |
| Appearance and Odor                     | Light amber red liquid with pungent aroma |                        |           |

**IV. FIRE AND EXPLOSION HAZARD DATA**

|                                     |  |
|-------------------------------------|--|
| Flash point Irritant                | 96°C   |
| Ignition temperature irritant       | 435°C  |
| Explosion limit in air, % by volume | 1.30% lower; 13.00% upper  |
| Suitable extinguishing media        | Water spray, dry chemical powder, foam   |
| Unsuitable extinguishing media      | Full water jet   |
| Special fire fighting procedures    | Evacuate all personnel from affected area. Use self contained breathing apparatus and protective clothing. |
| Unusual fire and explosion hazards  | None   |

**V. REACTIVITY DATA**

|                 |        |
|-----------------|--------|
| Stability       | Stable |
| Incompatibility | None   |

**VI. HEALTH HAZARD DATA****ACCUTE EFFECTS OF OVEREXPOSURE TO IRRITANT**

|                                 |  |
|---------------------------------|--|
| Ingestion                       | Burning sensation of throat, and may cause nausea and stomach pain.                              |
| Skin absorption                 | Not readily absorbed through the skin.   |
| Inhalation                      | Cough, gagging and shortness of breath. Burning sensation of the nose, mouth and the throat.     |
| Skin contact                    | Immediate inflammation of mucuos membranes, burning sensation and redness of the skin may occur. |
| Eye contact                     | Burning sensation and irritation. Immediate closing of the eyes.                                 |
| Chronic effects of overexposure | No evidence of adverse effects from available information.                                       |

**EMERGENCY AND FIRST AID MEASURES**

|   |  |
|---|--|
| Ingestion                                     | In the event of accidental swallowing, ingest water and get medical attention promptly.  |
| Skin  | Remove contaminated clothes. Flush affected area thoroughly with cool water to relieve all symptoms.   |
| Inhalation                                    | Remove subject into fresh air.   |
| Eyes  | Flush thoroughy with cool water for 15 minutes. Do not rub. Symptoms disappear in 45 minutes. If symptoms persist, get medical attention promptly.   |
| Medical conditions aggravated by overexposure | Because of its irritating properties, this material may aggravate an existing dermatitis.  |
| <b>NOTES TO PHYSICIAN</b>                     | There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition, only after rinsing the affected area with copious water for up to 45 minutes. |

**VII. LEAK PROCEDURES**

|   |  |
|---|--|
| Steps to be taken if material is released | Avoid contact with eyes. Do not breath vapor. Absorb liquid irritant spillage onto inert material (e.g. sand). Residues may be washed away with water and detergent. |
| Waste disposal method                     | Do not puncture or incinerate the Guardian Angel device. Dispose any residue, or disposable device in accordance with local, state and federal regulations.          |

**VIII. SPECIAL PROTECTION INFORMATION FOR INDUSTRIAL USE ONLY**

|                            |   |
|----------------------------|---|
| Respiratory protection     | Respiratory face mask required (Filter: Organic vapours and acid gas) |
| Ventilation                | Local exhaust or mechanical (general)                                 |
| Protective gloves          | Rubber or Plastic   |
| Eye protection             | Goggles   |
| Other protective equipment | Eye bath, Safety shower   |

**IX. SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

Keep away from heat and flame. HANDLING, TRANSPORTATION AND STORAGE ONLY IN CLOSED ORIGINAL PACKAGING. DO NOT OPEN THE ORIGINAL PACKAGING. Store at room temperature.

**OTHER PRECAUTIONS:**

Avoid contact with irritant liquid. Avoid accidental contact with eyes, skin or mucuos membranes.

The opinions expressed herein are those of qualified experts with PIEXON AG. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of the use of the product are not within the control of PIEXON AG it is the user's obligation to determine conditions of safe use of the product.

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**X. EMERGENCY PHONE NUMBER**

Call +41 (62) 919 91 00