Microderm

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

Product  Microderm
Supplier  Intracare B.V.
         Voltaweg 4
         5466 AZ Veghel - The Netherlands
         Tel.: +31 413 354 105
Application  Aerosol with a volume of 250 ml for skin care
Emergency telephone  +31 413 354 105

2 HAZARDS IDENTIFICATION

Extremely Flammable

Readily forms and explosive air-vapor mixture at ambient temperature.

Vapor is heavier than air and may travel to remote sources of ignition (e.g. along drainage systems, into basements etc.).

Cold burns (frostbite) will result from skin/eye contact with liquid product.

Liquid release or vapor pressure jets present a risk of serious damage to the eyes.

Abuse involving willful inhalation of very high concentrations of vapor, even for short periods can produce unconsciousness and might prove fatal.

Inhalation may cause irritation to the nose and throat, headache, nausea, vomiting, dizziness and drowsiness. In poorly ventilated or confined spaces, unconsciousness or asphyxiation may result.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Composition / information on ingredients / proprietary composition

<table>
<thead>
<tr>
<th>Number</th>
<th>Weight%</th>
<th>Chemical name</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5-7</td>
<td>Copper chelated complex</td>
<td>14025-15-1</td>
</tr>
<tr>
<td>2</td>
<td>5-7</td>
<td>Zinc chelated complex</td>
<td>14025-21-9</td>
</tr>
<tr>
<td>3</td>
<td>55-65</td>
<td>Butane-propane mixture</td>
<td>106-97-8</td>
</tr>
<tr>
<td>4</td>
<td>15-20</td>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
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</table>
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4  FIRST AID MEASURES

Inhalation: Remove the affected person to fresh air. Keep the patient warm and at rest. If breathing has stopped administer artificial respiration. Give external cardiac massage if necessary. If the person is breathing, but unconscious, place them in the recovery position. Obtain medical assistance immediately.

Skin: Burns should be flushed with tepid water to normalize temperature and until circulation returns. Cover the burns with sterile dressings. Do not apply ointments or powders. Obtain medical assistance immediately.

Eyes: Cold burns should be flushed immediately with tepid water to normalize temperature. Hold eyelids apart while flushing to rinse entire surface of the eye and lids with water. Cover the eye with a sterile dressing and obtain medical assistance immediately.

Ingestion: Not applicable

5  FIRE-FIGHTING MEASURES

These materials are delivered, stored and used at temperatures above their flash point. Avoid all naked flames, sparks, cigarettes, etc.

IN CASE OF FIRE, VACATE THE AREA AND IMMEDIATELY ALERT THE FIRE BRIGADE

Ensure an escape path is always available from any fire.

If gas has ignited, do not attempt to extinguish but, if safe to do so, stop gas flow and allow to burn out.

Use water spray to cool heat-exposed containers, and to protect surrounding areas and personnel effecting shut-off.

Beware of vapor accumulating to form explosive concentrations. Explosive vapors may travel, be ignited at remote locations and flash back. A water spray may be used for vapor dispersal.

Pressurized containers are liable to explode violently when subjected to high temperatures

Every precaution must be taken to keep containers cool to avoid the possibility of a boiling liquid expanding vapor explosion (BLEVE).

Extinguishing Media Dry powder, water

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus.

6  ACCIDENTAL RELEASE MEASURES

Immediate Emergency Action:
• Clear people away from the area to a safe place
• Do not operate electrical equipment unless flameproof
• Summon aid of emergency services
• Treat or refer casualties if necessary
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Further Action – Fire
• Stop product flow
• Use dry powder or carbon dioxide extinguishers
• Cool containers exposed to fire by water fog/spray

Further Action – Spillage
• Extinguish naked lights, e.g. cigarettes – AVOID MAKING SPARKS. Do not use a mobile phone
• Isolate power from sources of ignition and ventilate the area
• Position firefighting equipment
• Try to stop the flow of liquid product
• Cover drains and sewers. Disperse vapor with water spray

Note: Vapor may collect in confined spaces

7 HANDLING AND STORAGE

Handling
• No smoking or naked lights
• Ensure good ventilation
• Avoid inhalation of vapor
• Avoid contact with liquid
• Avoid contact with eyes.

Storage
Repiderma cans must be stored segregated from oxidant gases and other oxidants in store.

Information
• No smoking or naked lights
• Store and use only equipment/containers designed for use with this product
• Store and dispense only in well ventilated areas away from heat and sources of ignition.
• Do not remove warning labels from containers
• Ensure that Pipework and handling equipment are
• Explosive air/vapour mixtures may form at ambient temperature

Note: Product spilt on clothing may give rise to delayed evaporation and subsequent fire hazard

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Long-term exposure limit (8hr TWA) Butane 1450 mg/m³

Occupations Exposure Controls Engineering measures
Provide natural or explosion-proof ventilation that is adequate to ensure flammable gas does not reach its lower explosive limit.

Respiratory protection
• If operations are such that significant exposure to vapour may be anticipated, then suitable approved respiratory equipment should be worn.
• The use of respiratory equipment must be strictly in accordance with manufacturers’ instructions and any statutory requirements governing its selection and use.

Environmental Exposure Controls
Microderm

Not applicable. The substance is a vapour at normal temperatures at pressure.

9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearances</td>
<td>Green aerosol spray</td>
</tr>
<tr>
<td>Odor</td>
<td>Odor of isopropyl alcohol</td>
</tr>
<tr>
<td>Flash Point</td>
<td>-60 °C</td>
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<tr>
<td>Flammability Limits</td>
<td>2% to 9% in air</td>
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<tr>
<td>Auto-flammability</td>
<td>410 - 585 °C</td>
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<tr>
<td>Vapor Pressure</td>
<td>2 bar at 15 °C</td>
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<tr>
<td>Specific Gravity of Liquid</td>
<td>Unknown</td>
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<tr>
<td>Specific Gravity of Vapor</td>
<td>Unknown</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
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</table>

Important Health and Safety Executive Information
- Extremely Flammable (F+).
- Readily forms an explosive air-vapor mixture at ambient temperature.
- Vapor is heavier than air and may travel to remote sources of ignition (e.g. along drainage systems, into basements etc.).
- Liquid leaks generate large volumes of flammable vapor (approximately 250: 1).
- Cold burns (frostbite) will result from skin/eye contact with liquid.
- Liquid release or vapor pressure jets present a risk of serious damage to the eyes.
- Abuse involving willful inhalation of very high concentrations of vapor, even for short periods, can produce unconsciousness or might prove fatal. Inhalation may cause irritation to the nose and throat, headache, nausea, vomiting, dizziness and drowsiness. In poorly ventilated or confined spaces, unconsciousness or asphyxiation may result.

10 STABILITY AND REACTIVITY

Stability and Reactivity
Stable at ambient temperatures. Hazardous polymerization will not occur, however, it can form explosive mixture with air.

Conditions to avoid:
- Sources of ignition.
- Storage above 50 °C.

Materials to avoid:
Butane reacts violently with strong oxidizing agents (e.g. chlorates which may be used in agriculture), peroxide, plastics, chlorine dioxide and concentrated nitric acid.

 Decomposition products:
The substance arising from the thermal decomposition of these products will largely depend upon the conditions bringing about decomposition. The following hazardous substances may be expected from normal combustion:
- Carbon Dioxide
- Carbon Monoxide (if there is insufficient air for complete combustion).
11 TOXICOLOGICAL INFORMATION

**Eye Contact:**
Contact will present a risk of serious damage to the eyes.

**Skin Contact:**
Contact will cause cold burns and frost bite to the skin.

**Inhalation:**
Low vapor concentrations may cause nausea, dizziness, headaches and drowsiness. May have a narcotic effect if high concentrations are inhaled. High vapor concentrations may produce symptoms of oxygen.

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

**Carcinogenicity:** No known behavior
**Mutagenicity:** No known behavior
**Teratogenicity:** No known behavior

12 ECOLOGICAL INFORMATION

**Eco toxicity:** No known ecological damage is caused by this product.
**Air:** A mixture of volatile components which when released to air will rapidly react with hydroxyl radicals and ozone to give carbon dioxide and water.
**Water:** If released to water the product will rapidly evaporate.
**Soil:** If released to soil the product will rapidly evaporate.
**Mobility:** Spillages are unlikely to penetrate the soil
**Persistence and degradability:** Unlikely to cause long term adverse effects in the environment
**Bio accumulative potential:** This material is not expected to bio accumulate.
**Aquatic toxicity:** Unlikely to cause long term effects in the aquatic environment
**Results of PBT assessment:** A chemical safety report is not required for this product consequently no PBT is required.

13 DISPOSAL CONSIDERATIONS

**Disposal Considerations:**
- Do not discharge product into areas where there is a risk of an explosive mixture with air.
- Empty cylinders may contain some remaining product.
- Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.
- Empty containers represent a fire hazard
14 TRANSPORT INFORMATION

UN Proper Shipping name: UN1950 Aerosols, Flammable, 2.1, Limited Quantity
UN Number: 1950
Symbol: Flammable Gas
Packing Group: Special Containers
Class: 2
Classification Code: 2F
Label: 2.1
IATA / ICAO Hazard Class: 2.1 Limited Quantity
IMO Hazard Class: 2.1 Limited Quantity
Marine Pollutant: No
Hazard Identification Number: 23
Hazchem Code: 2YE

15 REGULATORY INFORMATION

This material has been classified according to the requirements of implementing the United Nations “Globally Harmonized System of Classification and Labelling of Chemicals” (GHS), EU Regulation 1271/2008 on the Classification, Labelling and Packaging of Substances and Mixtures (the CLP Regulation) and the Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP 4).

Product label
Symbols: Flame and exclamation mark

Signal word: Danger

Hazard statements
H222 – Extremely flammable aerosol
H302 – Harmful if swallowed
H319 – Causes serious eye irritation
H336 – May cause drowsiness or dizziness

Precautionary statements
P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P211 – Do not spray on open flame or other ignition source.
P251 – Pressurized container: Do not pierce or burn, even after use.
P410 + P412 – Protect from sunlight. Do not expose to temperatures exceeding 50° C / 122° F.
P280 – Wear eye protection.
P337 + P313 + P312 – If you feel unwell or eye irritation persists: Get medical advice/attention.
P261 – Avoid breathing vapors/spray.
P270 – Do not eat, drink or smoke when using this product.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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16 OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user’s own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Product is for external use of claw treatment. This product is unfit for animal and human consumption.

History

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<th>Date of printing</th>
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<tr>
<td>Composed by</td>
<td>C. Vulders</td>
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