1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

ProductName

: VERATRIDINE

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Very toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Possible risk of impaired fertility. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Synonyms | : | 4,9-epoxycevane-3beta, veratrate | 4alpha,12,14,16beta,17,20-heptol 3- | |
|--|-----------|-------------------------------------|---|---------------|
| Formula | : | C36H51NO11 | | |
| CAS-No. | EC-No. | | Classification | Concentration |
| 4,9-epoxycevane-3B,4a,12,14,16B,17,20-heptol 3-veratrate | | | | |
| 71-62-5 | 200-758-4 | - | T+, R26/27/28 - R36/37/38 - R62 | >= 95 % |
| n-He xane | | | | |
| 110-54-3 | 203-777-6 | - | F, Xn, N, Repr.Cat.3, R11 - R38 - R48/20 - R62 - R65 - R67 - R51/53 | <= 5 % |

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhale d

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire

protection.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

| Form | solid |
|-----------------------|-------------------|
| Colour | light yellow |
| Safety data | |
| pH | no data available |
| Melting point | 180 °C |
| Boiling point | no data available |
| Flash point | no data available |
| Ignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Water solubility | no data available |
| Solubility | 50 g/l Ethanol |

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

- Acute toxicity no data available Irritation and corrosion no data available Sensitisation
- no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Potential Health Effects

| Inhalation | May be fatal if inhaled. Causes respiratory tract irritation. |
|---------------|--|
| Skin | Causes skin irritation. May be fatal if absorbed through skin. |
| Eyes | Causes eye irritation. |
| Ingestion | May be fatal if swallowed. |
| Target Organs | Cardiovascular system., Kidney, Testes, Nerves., Peripheral nervous system., |
| | Testes. |

Additional Information

RTECS: YX5600000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

UN-Number: 1544 Class: 6.1 Packing group: I Proper shipping name: ALKALOIDS, SOLID, N.O.S.

IMDG

UN-Number: 1544 Class: 6.1 Packing group: I EMS-No: F-A, S-A Proper shipping name: ALKALOIDS, SOLID, N.O.S. Marine pollutant: No

IATA UN-Number: 1544 Class: 6.1 Packing group: I Proper shipping name: Alkaloids, solid, n.o.s.

15. REGULATORY INFORMATION

Labelling according to EC Directives

| \$ |
|-------|
| |
| dical |
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| |
| |

| | label where possible). |
|-----|--|
| S61 | Avoid release to the environment. Refer to special instructions/ Safety data sheets. |

In case of accident or if you feel unwell, seek medical advice immediately (show the

Hazardous components which must be listed on the label:

| 71-62-5 | 4,9-epoxycevane-3B,4a,12,14,16B,17,20-heptol 3-veratrate |
|----------|--|
| 110-54-3 | n-Hexane |

16. OTHER INFORMATION

S45

Text of R-phrases mentioned in Section 3

| R11 | Highly flammable. |
|-----------|--|
| R26/27/28 | Very toxic by inhalation, in contact with skin and if swallowed. |
| R36/37/38 | Irritating to eyes, respiratory system and skin. |
| R38 | Irritating to skin. |
| R48/20 | Harmful: danger of serious damage to health by prolonged exposure through |
| | inhalation. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic |
| | environment. |
| R62 | Possible risk of impaired fertility. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R67 | Vapours may cause drowsiness and dizziness. |

Further information

For R&D use only. Not for drug, household or other uses.



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WARRANTY:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.