

Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

MSDS Name: Bufalin
Synonyms: 3 β ,14-Dihydroxy-5 β ,20(22)-bufadienolide,
5 β ,20(22)-Bufadienolide-3 β ,14-diol
Company Identification: PI Chemicals Ltd.
Building B, 633 E Shan Road, Pudong New Area
Shanghai 200127, China
Telephone Number: 86-21-58953700
Fax Number: 86-21-58953701

Section 2 - Product Information

Catalog Number: PI-10501
CAS Number: 465-21-4
MDL Number: MFCD00056525
Purity: 98%

Section 3 - Physical and Chemical Properties

Physical state: Powder
Color: White
Molecular Formula: C₂₄H₃₄O₄
Molecular Weight: 386.52
Freezing/Melting Point: Not available
Boiling Point: Not available
Flash Point: Not available
Autoignition Temperature: Not available
Refractive Index (nD20): Not available
Density: Not available
Decomposition Temperature: Not available
Solubility: Not available

Section 4 - Hazards Identification

Eye: May cause eye irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation. May be fatal if absorbed through skin.
Ingestion: May be fatal if swallowed.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Section 5 - First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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

Skin: Wash off with soap and plenty of water. Consult a physician.

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

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

Section 6 - Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.

Conditions to avoid: Avoid moisture.

Materials to avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon oxides.

Section 7 - Handling and Storage

Handling: Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage: Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C.

Section 8 - Personal Protection

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Fire and Explosion Hazard Data

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.

Section 10 - Accidental Release Measures

Personal precautions: Avoid dust formation. Avoid breathing vapors, mist or gas.
Environmental precautions: Do not let product enter drains.
Methods and materials for containment and cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 11 - Toxicological Information

RTECS#: CAS# 465-21-4: EI2962500.
LD50/LC50: RTECS#: EI2962500.
Carcinogenicity: Bufalin - Not listed as a carcinogen by ACGIH, IARC, NTP, or OSHA.

Section 12 - Environmental information

Not available.

Section 13 - Disposal Consideration

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging: Dispose of as unused product.

Section 14 - Transport Information

ADR/RID: UN-Number: 3462 Class: 6.1 Packing group: II.
IMDG: UN-Number: 3462 Class: 6.1 Packing group: II.
IATA: UN-Number: 3462 Class: 6.1 Packing group: II.

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Indication of Danger: Very Toxic

OSHA Hazards: Target Organ Effect, Highly toxic by ingestion

Risk Phrase: R 28: Very Toxic if swallowed.

Safety Phrases:

S 28: After contact with skin, wash immediately with plenty of water (to be specified by the manufacturer).

S 36/37: Wear suitable protective clothing and gloves.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show label

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where possible)

Section 16 - Additional Information

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