

NANJING WHITE WHALE PHARMACEUTICAL CO., LTD.

南京鲸轮制药有限公司

ADDRESS: 29/F, GOLDEN EAGLE HANZHONG GARDEN, NO.1 HANZHONGMEN STREET,
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TEL: +86-025-86500535

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NANJING WHITE WHALE PHARMACEUTICAL CO., LTD.

MATERIAL SAFETY DATA SHEET

Date Printed: 04/06/2007

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Version 1.5

Section 1 - Product and Company Information

Product Name LEVAMISOLE HCL
Brand WHITE WHALE

Company NANJING WHITE WHALE PHARMACEUTICAL CO., LTD
Street Address 29/F, Golden Eagle Hanzhong Garden,
NO.1 Hanzhongmen Street, Nanjing, P.R. China
Technical Phone 0086 025 86536211
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Section 2 - Composition/Information on Ingredient

Substance Name
LEVAMISOLE HCL

CAS #
16595-80-5

SARA 313
No

Formula $C_{11}H_{12}N_2S \cdot CLH$



Section 3 - Hazards Identification

EMERGENCY OVERVIEW

- Toxic.
- Toxic if swallowed.
- Target organ(s): Immune system.

HMIS RATING

- HEALTH: 2*
- FLAMMABILITY: 0
- REACTIVITY: 0

NFPA RATING

- HEALTH: 2
- FLAMMABILITY: 0
- REACTIVITY: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

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INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.



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STORAGE

Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance

Color: White

Form: Powder

Property

Value

Molecular Weight

240.76AMU

pH

N/A

BP/BP Range

N/A

MP/MP Range

N/A

Freezing Point

N/A

Vapor Pressure

N/A

Vapor Density

N/A

Saturated Vapor Conc.

N/A

SG/Density

N/A

Bulk Density

N/A

Odor Threshold

N/A

Volatile%

N/A

VOC Content

N/A

Water Content

N/A

Solvent Content

N/A

Evaporation Rate

N/A

Viscosity

N/A

Surface Tension

N/A

Partition Coefficient

N/A

Decomposition Temp.

N/A

Flash Point

N/A

Explosion Limits

N/A

Flammability

N/A

Autoignition Temp

N/A

Refractive Index

N/A



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Optical Rotation

Miscellaneous Data N/A

Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides,
Sulfur oxides, Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be
irritating to mucous membranes and upper respiratory tract.

Ingestion: Toxic if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Immune system.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and
toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Oral

Rat

180 mg/kg

LD50

Intraperitoneal

Rat

42 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.

Lungs, Thorax, or Respiration:Other changes.



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Subcutaneous

Rat

80 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Intravenous

Rat

26 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Oral

Mouse

223 mg/kg

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Intraperitoneal

Mouse

34 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Subcutaneous

Mouse

52 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Intravenous

Mouse

18 MG/KG

LD50

Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Other changes.

Intramuscular

Mouse

121 MG/KG



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LD50

Parenteral

Frog

363 MG/KG

LD50

CHRONIC EXPOSURE - TERATOGEN

Species: Rat

Dose: 330 MG/KG

Route of Application: Oral

Exposure Time: (7-17D PREG)

Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

CHRONIC EXPOSURE - MUTAGEN

Species: Mouse

Route: Unreported

Dose: 10 MG/KG

Mutation test: Unscheduled DNA synthesis

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat

Dose: 480 MG/KG

Route of Application: Oral

Exposure Time: (19-22D PREG/4D POST)

Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive).

Species: Rat

Dose: 750 MG/KG

Route of Application: Oral

Exposure Time: (19-22D PREG/21D POST)

Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Species: Rat

Dose: 2125 MG/KG

Route of Application: Oral

Exposure Time: (19-22D PREG/21D POST)

Result: Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).



Section 12 - Ecological Information

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Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

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. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Toxic solids, organic, n.o.s.

UN#: 2811

Class: 6.1

Packing Group: Packing Group III

Hazard Label: Toxic substances.

PIH: Not PIH

IATA

Proper Shipping Name: Toxic solid, organic, n.o.s.

IATA UN Number: 2811

Hazard Class: 6.1

Packing Group: III



Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: T

Indication of Danger: Toxic.

R: 25

Risk Statements: Toxic if swallowed.

S: 36/37/39 45

Safety Statements: Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic.

Risk Statements: Toxic if swallowed.

Safety Statements: Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Statements: Target organ(s): Immune system.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard

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criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

DISCLAIMER

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

