

Zidovudine

Company Information

Sunchem Co.,Ltd.

Add: A-11F, 186 Yangtzi Middle Road, Yangzhou, China.

Tel:+86 514 87851548

Fax:+86 514 87872867

Email: info@sunchemgroup.com

Product Identification

【Product Name】

3'-Azido-3'-deoxythymidine

【Synonyms】

1-[(2R,4S,5S)-4-Azido-5-(hydroxymethyl)oxolan-2-yl]-5-methylpyrimidine-2,4-dione

3'-Azido-3'-deoxythymidine

Azidothymidine

Retrovir

【CAS】

[30516-87-1](#)

【Formula】

C₁₀H₁₃N₅O₄

【Molecular Weight】

267.24

【RTECS】

XP2072000

【RTECS Class】

Tumorigen; Drug; Mutagen; Reproductive Effector; Human Data

【Merck】

12,10252

【Beilstein/Gmelin】

3595791

Physical and Chemical Properties

【Appearance】

Slightly off-white odorless powdery solid.

【Solubility in water】

20 mg/ml and 71 mg/ml in alc @ 25 C

【Melting Point】

124 - 125

【Partition Coefficient】

.053

【Usage】

Medication.

First Aid Measures

【Ingestion】

DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician.

【Inhalation】

IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used.

【Skin】

IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If s

ymptoms such as redness or irritation develop, IMMEDIATELY call a physician and be prepared to transport the victim to a hospital for treatment.

【Eyes】

First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.

Handling and Storage

【Storage】

Keep in a cool, dry, dark location in a tightly sealed container or cylinder. Keep away from incompatible materials, ignition sources and untrained individuals. Secure and label area. Protect containers/cylinders from physical damage.

【Handling】

All chemicals should be considered hazardous. Avoid direct physical contact. Use appropriate, approved safety equipment. Untrained individuals should not handle this chemical or its container. Handling should occur in a chemical fume hood.

Hazards Identification

【Inhalation】

Exposure to this compound may cause a headache. It may also cause abdominal discomfort, hypersensitivity skin reaction and depression of white-cell counts. Convulsions or effect on seizure threshold may also occur.

【Skin】

Transverse nail pigmentation has been reported.

【Eyes】

See inhalation

【Ingestion】

See inhalation.

Exposure Controls/Personal Protection

【Personal Protection】

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Where chemical resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

【Respirators】

Wear a NIOSH-approved half face respirator equipped with an organic vapor/acid gas cartridge (specific for organic vapors, HCl, acid gas and SO₂) with a dust/mist filter.

【Exposure Effects】

Seizures have been rarely reported following therapeutic use, and have occurred after overdose. Headache was experienced in a patient who took an overdose of zidovudine, in combination with ketoconazole. The amount of zidovudine and ketoconazole ingested were not specified. Fatigue was experienced in a patient who took an overdose of zidovudine, in combination with ketoconazole. The amount of zidovudine and ketoconazole ingested were not specified.

Fire Fighting Measures

【Fire Fighting】

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher.

【Fire Potential】

This material is probably combustible.

Accidental Release Measures

【Small spills/leaks】

If you spill this chemical, you should dampen the solid spill material with water, then transfer the dampened material to a suitable container. Use absorbent paper dampened with water to pick up any remaining material. Seal your contaminated clothing and the absorbent paper in a vapor-tight plastic bag for eventual disposal. Wash all contaminated surfaces with a soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

Stability and Reactivity

【Stability】

No data.

【Incompatibilities】

Toxic gases are formed by mixing materials of this class with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, halogenated organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidizing or reducing agents. Flammable gases are formed by mixing materials in this group with alkali metals. Explosive combination can occur with strong oxidizing agents, metal salts, peroxides, and sulfides.