

Section 1: Identification

Product Name Acyclovir USP
Commercial Name Zovirax, Aciclovir
Product Use Only used for drug product
Restrictions On Use No information available

Product Code 30-2994

Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Classification is not applicable
CFR 1910.1200

Signal Word NON-HAZARDOUS

Hazard Statement(s) Not available
Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Not available
Response Not available.
Storage Not available
Disposal Not available

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Acyclovir USP
% By Weight 100
CAS# 59277-89-3
Molecular Weight 225.2 g/mole
Chemical Formula C8-H11-N5-O3
Synonym(s) 9-[(2-Hydroxyethoxy)methyl]guanine; Acycloguanosine

Mixtures

| Name | CAS# | % by Weight | TLV/PEL | LC50/LD50 |
|---------------|-------------|--------------------|----------------|------------------|
| Acyclovir USP | 59277-89-3 | 100 | | |

Section 4: First-Aid Measures

| | |
|-------------------------|---|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin Contact | Wash off with soap and water. Get medical attention if irritation develops and persists |
| Eye Contact | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Symptoms/Effects | |
| Acute | Pharmacologically active material. Occupational exposure may cause physiological effects. |
| Delayed | Pharmacologically active material. Occupational exposure may cause physiological effects. |

Immediate Medical Attention

Treatment of overdose may include the following: Provide adequate hydration to prevent precipitation of acyclovir in the renal tubules. Administer activated charcoal as a slurry. Monitor for abnormal renal function, elevated hepatic enzymes, and significant CNS symptoms. Hemodialysis may aid in the removal of acyclovir from the blood. Peritoneal dialysis is not effective in providing acyclovir clearance.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Water. Foam. Dry chemical or CO₂. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

Firefighters Special Equipment and Precautions

Wear suitable protective equipment Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental Release Measures

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Wear appropriate protective equipment and clothing during clean-up. Methods and materials for containment and cleaning up: Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Handling: As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Combustible dust clouds may be created where operations produce fine material (dust). Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

| | |
|-----------------------------|---|
| Exposure Limits | TWA 5000 micrograms/m ³ |
| Engineering Controls | For laboratory operations, use local exhaust ventilation or a ventilated enclosure for high energy operations such as particle sizing. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred. |

Personal Protection

Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Train employees in proper gowning and degowning practices. Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Use a tight-fitting full-face respirator with HEPA filters for spill cleanup. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene consideration: Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment.

Section 9: Physical and Chemical Properties

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|---|---|--|--------------------------|
| Appearance | White . Powder. Solid. | | |
| Odor | Not available | | |
| Odor Threshold | Not available | | |
| Melting Point | 492.8 - 494.6 °F (256 - 257 ° | pH | Not available |
| Freezing Point | Not available | Vapor Pressure | < 0.0000001 kPa at 25 °C |
| Boiling Point/Range | Not available. | Vapor Density | Not available. |
| Decomposition temperature | Not available | Viscosity | Not available. |
| Partition Coefficient: n-octanol/water | -1.56 | Evaporation Rate | Not available |
| Flash Point | Not available. | Autoignition temperature | Not available |
| Flammability | Not available | Flammability or Explosive Limits: | |
| | | Lower | Not available |
| | | Upper | Not available |
| Solubility(ies) | Slightly soluble in water. | | |
| Other | Alcohol: Insoluble. Dilute mineral acids: Soluble. Dimethylsulfoxide: Soluble Chemical family Synthetic acyclic purine nucleoside analogue. Dust explosion properties Kst 136 bar.m/s Minimum ignition energy (MIE) - dust cloud 200 - 300 mJ Molecular formula C8-H11-N5-O3 Molecular weight 225.2 Potential for dust explosion Ignition of dust cloud produces a weak explosion | | |

Section 10: Stability and Reactivity

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|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport |
| Chemical Stability | Material is stable under normal conditions |
| Hazardous Polymerization | No dangerous reaction known under conditions of normal use |
| Conditions to Avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials |
| Incompatible Materials | Strong oxidizing agents. |
| Hazardous Decomposition Products | NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions |

Section 11: Toxicological Information

| | |
|--|---|
| RTECS | UP0791400 |
| Acute Toxicity | Inhalation LC50 Rat > 15.1 mg/l Oral LD50 Mouse > 10 g/kg Rat > 20 g/kg |
| Skin Corrosion/Irritation | Not available. |
| Serious Eye Damage/Irritation | Not available |
| Respiratory or Skin Sensitization | Not available. |
| Germ Cell Mutagenicity | Not available |
| Carcinogenicity | Not available |
| Reproductive Toxicity | No information available |

Routes of Entry

Not available.

Symptoms Related to Exposure

Gastrointestinal disturbances. Lightheadedness. Mental status changes. Headache. Skin rash. Decreased urination. Agitation. Trembling. Hallucinations. Seizures.

Potential Health Effects

Acute: Hazardous in case of skin contact (irritant), of eye contact (irritation), Of ingestion, of inhalation.

Target Organ(s) Not available**Section 12: Ecological Information****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and Degradability

Not available.

Bioaccumulative Potential

Octanol/water partition coefficient log Kow -1.56

Mobility in Soil

Not available

Other Adverse Effects

Not available

Section 13: Disposal Considerations**Waste Disposal**

Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Disposal of Container

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations

Not available

Section 14: Transport Information**DOT Classification**

DOT Not regulated as dangerous goods

Section 15: Regulatory Information**Regulations**

US federal regulations: This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) Not regulated. SARA 302 Extremely hazardous substance Superfund Amendments and Reauthorization Act of 1986 (SARA) Not listed. YesSARA 311/312 Hazardous chemical Combustible dust Classified hazard categories SARA 313 (TRI reporting) Not regulated Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated. Safe Drinking Water Act (SDWA) US state regulations California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

Other

Not available.

Section 16: Other Information

Abbreviations and acronyms OHS: Globally Harmonized System of Classification and Labelling of Chemicals. CAS: Chemical Abstracts Service (division of the American Chemical Society). ACGIH American Conference of Governmental Industrial Hygienists 1ARC: International Agency for Research on Cancer NTP: National Toxicology Program RTEC& Registry of Toxic Effects of Chemical Substances. TSCA: Toxic Substances Control Act, The American chemical inventory. IECSC: Inventory of existing chemical substances in China. DSL: Domestic Substances List, The Canadian chemical inventory. AILS: The Australian Inventory of Chemical Substances.