# Panobinostat: sc-208148



# MATERIAL SAFETY DATA SHEET

## **Section 1 - General Information**

Chemical Name: Panobinostat CAS Reg. Number: 404950-80-7 Catalog Number: sc-208148 Supplier: Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, CA 95060 800.457.3801 or 831.457.3800

Emergency: ChemWatch Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

# Section 2 - Hazardous Ingredients/Identity Information

The toxicological properties have not been tested, exercise due care.

# Section 3 - Physical/Chemical Characteristics

Boiling Point: N/A Form: Solid Vapor Pressure: N/A Specific Gravity(H2O=1): N/A Molecular Formula: C21H23N3O2

# Section 4 - Reactive Data

Stability: Stable Incompatibility (Materials to Avoid): Strong oxidizing agents. Conditions to Avoid: Strong oxidizers Hazardous Decomposition or Byproducts: Toxic fumes of: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides. Hazardous Polymerization: Will not occur

# **Section 5 - Control Measures**

Respiratory Protection: Niosh/Msha approved respirator Protective Gloves: Chemical resistant gloves Other Protective Clothing: Lab coat or apron N/A Melting Point: N/A Evaporation Rate (ButylAcetate=1): N/A Vapor Density: N/A Molecular Weight: 349.43

Solubility in Water:

Ventilation: Hood Eye Protection: chemical safety goggles Other Protection: safety shower and eye bath

# **Section 6 - First Aid Measures**

Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

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

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

**Eyes:** 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.

# Section 7 - Health Hazard Data

#### Health Hazards (Acute and Chronic):

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

#### 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: May be harmful if swallowed.

A cinnamic hydroxamic acid analogue with potential antineoplastic activity. Panobinostat selectively inhibits histone deacetylase (HDAC), inducing hyperacetylation of core histone proteins, which may result in modulation of cell cycle protein expression, cell cycle arrest in the G2/M phase and apoptosis. In addition, this agent appears to modulate the expression of angiogenesis-related genes, such as hypoxia-inducible factor-1alpha (HIF-1a) and vascular endothelial growth factor (VEGF), thus impairing endothelial cell chemotaxis and invasion. HDAC is an enzyme that deacetylates chromatin histone proteins.

#### Medical Conditions Generally Aggravated by Exposure:

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

# Section 8 - Precautions for Safe Handling and Use

#### Steps to be Taken in Case Material is Released or Spilled:

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. 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. **Waste Disposal Method:** 

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.

#### Precautions to Be Taken in Handling and Storage:

Keep tightly closed. Store in a cool dry place. Store at -20 °C.

# Section 9 - Fire and Explosion Hazard Data

Extinguishing Media: Carbon Dioxide, Dry chemical powder or appropriate foam. Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Unusual Fire and Explosion Hazards: EMITS TOXIC FUMES UNDER FIRE CONDITIONS

# Section 10 - Transportation Information and regulatory information DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport. **IATA** 

Non-Hazardous for Air Transport: Non-hazardous for air transport.

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user. 2/10/2012