

MATERIAL SAFETY DATA SHEET

Section 1 - CHEMICAL AND COMPANY INFORMATION

Chemical Name **CHIR 98014**

Supplier **Santa Cruz Biotechnology, Inc.**
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Synonyms **N6-[2-[[4-(2,4-Dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyrimidinyl]amino]ethyl]-3-nitro-2,6-pyridinediamine;**

Catalogue # **sc-207421**

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

Cas Reg. No **556813-39-9**

Section 2 - Hazardous Ingredients/Identity Information

The toxicological properties of this compound have not been thoroughly investigated. Exercise due care.

Section 3 - Physical/Chemical Characteristics

Molecular Formula **C20H17C12N9O2**

Molecular Weight **486.31**

Boiling Point **N/A**

Vapor Pressure **N/A**

Vapor Density **N/A**

Solubility in Water **N/A**

Appearance and Odor **Yellow Solid**

Specific Gravity(H₂O=1) **N/A**

Melting Point **192-196°C**

Evaporation Rate (Butyl Acetate=1) **N/A**

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 and
hydrogen chloride gas**

Hazardous Polymerization **will not occur**

Section 5 - Control Measures

Respiratory Protection **Niosh/Msha approved respirator**

Ventilation **Use in fume hood**

Protective Gloves **Chemical resistant gloves**

Eye Protection **safety goggles**

Other Protective Clothing **Lab coat or apron**

Other Protection **Safety shower and eyewash**

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 atleast 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)

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

Ingestion: Harmful if swallowed.

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

A glycogen synthase kinase-3 (GSK-3) inhibitor. Effects of GSK inhibitors on p-tau, GSK-3 β activities and cell death were measured in a human neuronal cell line (LUHMES). Lithium and CHIR98014 reduced tau phosphorylation (Ser396) in the cortex and hippocampus. Inhibition of GSK-3 is recently regarded as one of the viable approaches to therapy for Alzheimer's disease, cancer, diabetes mellitus, osteoporosis, and bipolar mood disorder.

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.

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

Avoid contact & inhalation. Keep tightly closed. Restrict handling by unqualified personnel.

Section 9 - Fire and Explosion Hazard Data

Extinguishing Media

Water spray. 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 all inclusive and shall be used only as a guide. We will not be held responsible for any damage resulting from handling or contact with the chemical described.

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.