N-Methylbutane-1,4-diamine, Dihydrochloride: sc-212242



The Power to Ouestio

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name: N-Methylbutane-1,4-diamine, Dihydrochloride

Catalog Number: sc-212242

Synonyms: N-Methylputrescine, Dihydrochlorid **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

2. Composition / Information on Ingredients

Name N1-methylbutane-1,4-diamine dihydrochloride

CAS No 89690–09–5

3. Hazards Identification

4. First Aid Measures

Eye Contact Immediately flush eye(s) with copious amounts of water and continue to do so for at least 15 minutes. If symptoms are severe and/or persistent, SEEK MEDICAL ATTENTION.

Ingestion Wash mouth out thoroughly with copious amounts of water. Do not induce vomiting. If symptoms are severe and/or persistent, SEEK MEDICAL ATTENTION.

Inhalation Remove from exposure, rest and keep warm. If exposure has been great or if symptoms are severe and/or persistent, SEEK MEDICAL ATTENTION.

Skin Contact Remove all contaminated articles of clothing, shoes, gloves, etc. and immediately flush contaminated area with copious amounts of water and continue to do so for at least 15 minutes. If symptoms are severe and/or persistent, SEEK MEDICAL ATTENTION.

5. Fire Fighting Measures

Fire Fighting In the event of a fire involving this material, extinguish using dry chemical powder, chemical foam, sand or similar. DO NOT USE WATER. Protective clothing and breathing apparatus should be worn as deemed necessary.

6. Accidental Release Measures

Environmental Precautions Do not allow material to enter drains, water courses or to contaminate soil. **Methods for Cleaning Up** Evacuate area. For large spillages, contain liquid within sand bund then remove both solids and liquid to closed containers. Store containers containing spillage outdoors in a secure, well ventilated area away from personnel.

Evacuate area. In small quantities, absorb on sand, vermiculite, diatomaceous earth or any inert absorbent material then place in closed container for disposal. Store container containing spillage outdoors in a secure, well ventilated area away from personnel.

Personal Precautions See Section 8.

7. Handling And Storage

Handling This product should only be handled by persons suitably qualified and competent in the handling of potentially hazardous chemicals. It should be noted that the toxicological and physiological properties of this chemical may not be fully known (see section 11) and that new hazards may arise from the reactions between this product and other chemicals (see section 10). It is important that all persons intending handling this chemical read this sheet and are aware of the information given regarding fire, health and chemical hazard before proceeding further.

Storage Store in a well ventilated, secure area. Store under an inert atmosphere.

8. Exposure Controls/Personal Protection

Eye Protection Where a full face mask is not to be used, suitable protective goggles, eyeshields or approved safety glasses should be worn.

Hand Precautions Wear gloves or gauntlets which are non-permeable to material and any carrier solvent. **Respiratory Precautions** Wear approved mask or respirator suitable for level and duration of exposure. **Skin Protection** Wear suitable protective clothing as and when necessary.

9. Physical And Chemical Properties

Appearance White Crystalline Solid

Boiling PointNo DataMelting Point176 to 178Flash PointNo Data

Molecular Formula C5 H14 N2 .2HCl

Molecular Weight 175.101 **Density** No Data **Purity** 97%+ Solubility in DMSO No Data Solubility in DMF No Data Solubility in CH2 CI2 No Data Solubility in Me CN No Data Solubility in THF No Data Solubility in Me OH No Data

N.B. The appearance is that of a representative sample. There may be some variance between batches.

10. Stability And Reactivity

Conditions to Avoid This material should not be used or stored in conditions of high (or highly fluctuating) temperature or be exposed to any possible source of ignition. Exposure of the material to direct sunlight or the air should be kept to a minimum and a moist atmosphere avoided.

Materials to Avoid Incompatible with bases and basic gases

Toxic Products May evolve Hydrogen chloride/Chlorine.

Combustion/Decomposition Oxides of nitrogen.

11. Toxicological Information

Inhalation Toxicity No Data
Oral Toxicity No Data
Skin Toxicity No Data
Toxicological Information No Data
(Generic)

Toxicological Information No Data

(Specific)

12. Ecological Information

Ecological Information No Data

13. Disposal Considerations

Disposal Considerations Arrange for the immediate collection of material by a licensed disposal contractor/ company. All waste disposal must be carried out in consultation with the local Waste Disposal Authority and be in accordance with all national and regional regulations.

14. Transport Information

UN Number No Data
IATA Class No Data
EINECS No No Data
IATA Packing Group No Data
IATA Sub Risk No Data

15. Regulatory Information

Risk Phrases R20/21/22 – Harmful by inhalation in contact with skin and if swallowed

R34 - Causes burns

Safety Phrases S23 – Do not breathe gas/fumes/vapour/spray

S24/25 - Avoid contact with skin and eyes

S36/37/39 – Wear suitable protective clothing gloves and eye/face protection

16. Other Information

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.

05/12/2011