

# Material Safety Data Sheet

## 10-DEBC hydrochloride: sc-203459



The Power to Question

### 1. COMPOSITION/INFORMATION ON INGREDIENTS

Product name: 10-DEBC hydrochloride  
Catalog number: sc-203459  
Chemical name: 10-[4'-(N,N-Diethylamino)butyl]-2-chlorophenoxazine hydrochloride  
Company: Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 95060  
800.457.3801 or 831.457.3800

### 2. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Formula:  $C_{20}H_{25}N_2OCl \cdot HCl$   
CAS#: 201788-90-1  
Molecular Weight: 381.34

### 3. HANDLING AND STORAGE

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Material should be stored in a tightly sealed container under the storage condition stated on the Product Information sheet and on the vial label.

### 4. STABILITY AND REACTIVITY

Stability: Stable under normal handling conditions.

Conditions to avoid: Not applicable for this product

Hazardous Combustion/Decomposition of Product: May emit toxic gases such as carbon dioxide, carbon monoxide and nitrogen oxide upon thermal decomposition.

### 5. HAZARDS IDENTIFICATION

Exposure may cause irritation to eyes, mucous membranes, upper respiratory tract and skin.

### 6. TOXICOLOGICAL INFORMATION

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

RTECS No: Not assigned  
Target Organs: Eyes; Respiratory system; Skin  
Toxicity Data: No data available

### 7. REGULATORY INFORMATION

Classification: Caution: Substance not yet fully tested.  
Safety Phrases: S22 - Do not breathe dust  
S24/25 - Avoid contact with skin and eyes  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear appropriate chemical resistant gloves, safety goggles and other protective clothing to prevent contact with eyes and skin. Laboratory should be equipped with a safety shower and eye wash station. Avoid prolonged or repeated exposure. Do not breathe dust. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

### 9. FIRST-AID MEASURES

In cases of SKIN CONTACT: Wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes and wash before wearing. In case of eye contact, flush with copious amounts of water for at least 15 minutes.

In cases of INHALATION: Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration.

In cases of INGESTION: If swallowed, rinse mouth out with water, contact local poison centre and call a physician.

### 10. FIRE-FIGHTING MEASURES

Extinguishing Media: Material is non-combustible. Use extinguishing media appropriate to surrounding fire conditions.

Unusual Fire and Explosive Hazards: May emit toxic gases upon thermal decomposition.

Special Fire-Fighting Procedures: Wear protective clothing to prevent contact with skin and eyes.

### 11. ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing. Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under DISPOSAL CONDITIONS.

### 12. ECOLOGICAL INFORMATION

Data not yet available - treat as potentially toxic if released into the environment.

### 13. DISPOSAL CONDITIONS

As specific country, federal, state and local environmental regulations are varied and change frequently, we recommend that you contact your local department for Health Services for information on the correct disposal of this product.

### 14. TRANSPORT INFORMATION

U.N. Number:  
Proper Shipping Name:  
IATA Class:  
IATA Packing Group:

### 15. OTHER INFORMATION

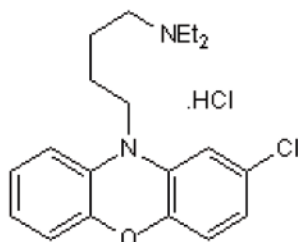
*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

#### Emergency Contact:

Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 95060  
800.457.3801 or 831.457.3800  
or Luis Yanez 831.251.2170

10/21/2009

**Description:** Selective inhibitor of Akt/PKB. Inhibits IGF-1-stimulated phosphorylation and activation of Akt (complete inhibition at 2.5  $\mu$ M), suppressing downstream activation of mTOR, p70 S6 kinase and S6 ribosomal protein. Shows no activity at PDK1, SGK1 or PI 3-kinase. Inhibits cell growth ( $IC_{50} \sim 2-6 \mu$ M) and induces apoptosis in rhabdomyosarcoma cells.



**Storage:** Desiccate at +4°C

#### References:

**Thimmaiah *et al*** (1992) Synthesis and chemical characterization of N-substituted phenoxazines directed toward reversing vinca alkaloid resistance in multidrug-resistant cancer cells. *J.Med.Chem.* **35** 3358. **Thimmaiah *et al*** (2005) Identification of *N*<sup>10</sup>-substituted phenoxazines as potent and specific inhibitors of Akt signaling. *J.Biol.Chem.* **36** 31924.

**Solubility:** Water to 100 mM  
DMSO to 100 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20° C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### Other Information: