SANTA CRUZ BIOTECHNOLOGY, INC.

Ambenonium dichloride: sc-203507

SANTA CRUZ

The Power to Question

MATERIAL SAFETY DATA SHEET

1. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name: Ambenonium dichloride

Catalog Number: sc-203507

Chemical Name: N,N'-[(1,2-Dioxo-1,2-ethanediyl)bis(imino-2,1-ethanediyl)]bis

(2-chloro-N,N-diethylbenzenemethaminium) dichloride

Supplier: Santa Cruz Biotechnology, Inc.

2145 Delaware Ave. Santa Cruz, California 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. PHYSICAL AND CHEMICAL PROPERTIES

CAS Number: 52022-31-8

Formula: $C_{28}H_{42}CI_4N_4O_2 \bullet xH_2O$ Molecular Weight: 608.48 (anhydrous)

Form: Solid

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. Store at room temperature.

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

RTECS Substance category: Drug Exposure may cause irritation to eyes, mucous membranes, upper respiratory tract and skin; Exposure may cause the following: Dyspnea, Fasciculations, Pupiliary constriction.

6. TOXICOLOGICAL INFORMATION

RTECS No: BR9808000

Target Organs: Central nervous system; Eyes; Respiratory system; Skin

Toxicity Data: ORL-RAT LD50: 18500µg/kg; SCU-RAT LD50:

4500µg/kg; IVN-RAT LD50: 2720µg/kg; ORL-MUS LD50: 145mg/kg; IPR-MUS LD50: 6300µg/kg; SCU-MUS LD50: 3700µg/kg; IVN-MUS LD50: 1510µg/kg; ORL-CAT LDLo:

1600µg/kg

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

Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented above. See actual entry in RTECS for complete information.

7. REGULATORY INFORMATION

Classification: Very Toxic. May be fatal if inhaled, swallowed or absorbed

through skin

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

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Risk Phrases: R23/24/25 - Toxic by inhilation, in contact with skin and if

wallowed

R28 - Very Toxic if swallowed

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 center 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 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: UN2811

Proper Shipping Name: Toxic Solid, Organic, N.O.S

IATA Class: 6.1 IATA Packing Group: II

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.

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