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SAFETY DATA SHEET

GLOCOUNT® TABLETS

1. IDENTIFICATION OF SUBSTANCE/ PREPARATION

Product Name : GLOCOUNT® TABLETS
 Molecular Formula : C₂₁H₂₀N₃Br
 Alternative Names : 3,8-Diamino-5-ethyl-6-phenylphenanthridinium bromide (tablets), Ethidium bromide (tablets), Prothidium bromide (tablets).
 CAS No. : 1239-45-8 (homidium bromide)
 EINECS No. : 2149846 (homidium bromide)
 Uses : White blood cell counting in milk samples
 Company Identification : D & F Control Systems, Inc.
 6773 Sierra Court, Suite E
 Dublin, California 94568 U.S.A.
 Emergency Telephone : 303-739-1110

2. COMPOSITION/ INFORMATION ON INGREDIENTS

<u>Component</u>	<u>Hazard Class</u>	<u>Risk Phrase(s)</u>	<u>mg/tablet</u>
Homidium Bromide	Very Toxic (T+)	R22, R26, R38, R40.	250
Inert tablet excipient/lubricant	Not applicable	Not applicable	trace

3. HAZARDS

Health : The dust is very toxic by inhalation. Studies indicate that homidium bromide is mutagenic in a number of test systems, and must therefore be associated with possible heritable genetic damage in man. The tablets are harmful if swallowed. Stable at normal temperature. Not a flammable hazard but will burn if exposed to heat or flame.
Fire and Explosion :
Environment : No relevant data available.

4. FIRST-AID

Eyes : Immediately irrigate with water for at least 10 minutes. Obtain medical attention.
Skin : Immediately drench with water. Remove contaminated clothing. Swab affected skin with water or soap and water. Obtain medical attention.
If Swallowed : Wash out mouth thoroughly with water, give sips of water to drink. Obtain medical attention.
If Inhaled : Remove to fresh air. Keep warm and at rest. Obtain urgent medical attention.

5. FIRE FIGHTING

The tablets will burn in air, producing toxic gases. Self-contained breathing apparatus should be provided for fire-fighters in all circumstances. Water spray, foam, carbon dioxide and dry chemical powder are suitable extinguishing agents.

6. ACCIDENTAL RELEASE

Personal Precautions

Wear an approved particulate respirator, PVC or rubber gloves and chemical safety goggles.

Environmental Precautions

Prevent entry into watercourses.

Methods For Cleaning Up

Immediately sweep up or vacuum clean (avoid creating a dust cloud) and remove the spillage to a polythene lined container for subsequent correct disposal. Clean the spillage site with detergent and water and retain washings for correct disposal.

7. HANDLING AND STORAGE

Handling

Ensure good general ventilation in areas where used. Use mechanical local exhaust ventilation wherever possible. Avoid inhalation. Avoid contact with skin, eyes and clothing. Contact with the tablets stains the skin purple. Where there is a risk of personal contact, protective clothing including approved respiratory protection, PVC or rubber gloves, and chemical safety goggles, must be worn. It is advisable to wash gloves before removing from the hands.

Storage

Store at ambient temperatures in sealed containers away from:
(i) oxidizing agents; (ii) heat and sources of ignition; (iii) food drink and animal feedstuff.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits

No figures published. An in-house workplace exposure level of as near zero as possible, but in any case not to exceed 0.001 mg/m³, has been established.

Respiratory Protection

Minimum is approved particulate respirator, but air fed equipment preferred.

Hand Protection

PVC or rubber gloves.

Eye Protection

Chemical safety goggles.

Skin Protection

Overall or disposable coverall.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Dark purple tablets.

For Homidium Bromide

Odor

Faint, characteristic.

Molecular Weight

394.2

Melting Point (°C)

238-250°C.

pH

4 to 7 (2% w/v solution)

Solubility in Water

Soluble.

Solubility in Other Solvents

Slightly soluble in ethanol, partially soluble in chloroform.

10. STABILITY AND REACTIVITY

Stability/Reactivity

Stable at normal temperature.

Conditions to Avoid

Heat and sources of ignition.

Materials to Avoid

Oxidizing materials.

Hazardous Decomposition

Products

Oxides of nitrogen and hydrogen bromide.

11. TOXICOLOGICAL INFORMATIONFor homidium bromide

LD ₅₀ oral rat	:	1503 mg/kg (males), 2177 mg/kg (females)
LC ₅₀ inhalation rat	:	0.0118 to 0.134 mg/liter.
LD ₅₀ intravenous rat	:	16 mg/kg
LD ₅₀ oral mouse.	:	1000 mg/kg
LD ₅₀ intravenous mouse	:	12 mg/kg
LD ₅₀ intravenous monkey	:	13 mg/kg

Homidium bromide is genotoxic in a number of test systems, including Ames, cell mutation, cell transformation and cytogenetics assays.

12. ECOLOGICAL INFORMATION

No relevant data available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with current legislation, preferably using high temperature incineration. Contaminated empty packaging materials should be treated in a similar manner.

14. TRANSPORT INFORMATION

UN Number : 2811 Toxic solid, organic, nos. / UN Hazard Class : 6.1 / UN Packing Group : I (based on inhalation study)

15. REGULATORY INFORMATION

Classification of risk	Very toxic (T +)	
Risk phrases	R40	Possible risk of irreversible effects.
	R26	Very toxic by inhalation.
	R22	Harmful if swallowed.
	R38	Irritating to skin.
Safety phrases	S2	Keep out of reach of children.
	S24/25	Avoid contact with skin & eyes.
	S26	In cases of contact with eyes, rinse immediately with plenty of water & seek medical advice.
	S28	After contact with skin, wash immediately with plenty of water.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S53	Avoid exposure - obtain special instructions before use.	

16. OTHER INFORMATION

None