

Laboratory

TETRAMINE

I. Protocol Overview

Tetramethylenedisulfotetramine, commonly known as tetramine, is a colorless, odorless, and extremely toxic rodenticide. Tetramine is prohibited in the United States and banned in China, but it is still widely accessible. Tetramine is rapid acting with signs and symptoms appearing as quickly as 1–5 minutes depending on the dose.

Tetramine blocks the GABA receptors exciting the central nervous system and inducing convulsions or seizures. The LD_{50} for tetramine is ~0.1 mg/kg, with 6–12 mg sufficient for to kill an adult. There is no known antidote for tetramine.

Signs and symptoms of potential exposure include headache, nausea, dizziness, fatigue, anorexia, numbness, and listlessness. More severe symptoms include loss of consciousness, seizures, foaming at the mouth, coma, and death from respiratory failure.

For all suspected chemical exposures, consult the Poison Control Center (800-222-1222) located at Children's Hospital of Philadelphia. Information and treatment advice is available to the public and healthcare professionals at no charge.

Gas Chromatography Mass spectrometry (GC/MS) and ion selective probe (ISE) methods are used to detect the tetramine in urine, environmental, and food samples. Sample components are separated and then quantified using mass spectrometry analysis.

The Delaware Public Health Laboratory does not perform this testing. Contact the CDC or the Poison Control Center.

II. Contact Information

24/7 CDC Emergency Contact Number: 1-888-295-5156

Poison Control Center: 215-386-2100

III. CDC Website

http://www.cdc.gov/

24/7 Emergency Contact Number: 302-223-1520