

Laboratory

PHOSGENE OXIME (CX)

I. Protocol Overview

Phosgene oxime (CX or dichloroformoxime) is an urticant or nettle agent, producing an intense itching and a rash similar to hives. It is not a true vesicant because it does not cause blisters. It can be a colorless solid below 95°F or a yellowish-brown liquid with a peppery or pungent odor. Vapor and liquid phosgene oxime can cause immediate tissue damage on contact, and its solid form can produce symptoms.

Rapid onset of severe symptoms include unbearable pain in exposed skin and eyes; difficulty with sight or blindness after ocular exposure; and sore throat, hoarseness, dyspnea, chest pain, and cough after respiratory exposure. Prolonged effects include skin blanching with an erythematous ring, wheals, brown pigmentation, eschar formation, and sloughing, conjunctivitis, lacrimation, lid edema, and blepharospasm. Severe exposures may include: keratitis, iritis, corneal perforation, and blindness, mucous membrane irritation, pulmonary edema, rales, wheezing, pulmonary thromboses, and gastrointestinal tract hemorrhagic inflammatory changes.

Chemical sensors can detect phosgene oxime in the environment.

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.

There are no known clinical biomarkers for detection of phosgene oxime in clinical samples. Rapid toxicological screening may rule out other exposures. Gas chromatography with nitrogen phosphorous detection (GC-NFD) or electron capture detection (GC-ECD) methods is used to detect phosgene oxime contamination in environmental and food samples.

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://emergency.cdc.gov/agent/phosgene-oxime/basics/facts.asp

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