

History

- Discovered 1812 by John Davy
- Used for chemical warfare in WWI

Phosgene

Symptoms of phosgene exposure

- Coughing
- Burning sensation in the throat and eyes
- Blurred vision
- Difficulty breathing
- Skin contact can result in lesions similar to frostbite or burns
- Fluid build up in lungs 2 to 6 hours after exposure
- Delayed symptoms up to 48 hours after

Exposure protocol

- Remove clothing if in contact (cut off do not move over head) and put in hood
- Move to fresh air
- Wash with soap and water and seek medical attention

Uses

- Still used industrially for synthesis of isocyanates and carbonates
- Largely replaced by the solid triphosgene for laboratory use
- Occasionally used in total synthesis when nothing else works

Properties

Bp 8.2 °C

Sold as toluene solution (0.1M)

500 ppm (human, 1 min)

