

Chlorine Gas – Usage, Health Effects, First Aid and Response

Chlorine is a greenish yellow gas with pungent and irritating odour at room temperature. It is highly reactive, toxic and hazardous in nature, at the same time very useful for mankind.

USAGE: It is commonly used as bleaching agent, utilized to control the bacteria and viruses in drinking water, also widely used in pharmaceuticals, dyes, automotive and agriculture industry.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT: High concentrations can cause severe irritation and tissue destruction. Symptoms include burning, prickling sensations and blisters.

EYE CONTACT: Causes severe burns. Contact with rapidly expanding gas may cause frostbite.

INHALATION: Toxic by inhalation. Severely corrosive to the respiratory system. High concentrations may cause unconsciousness and death.

FIRST AID: Keep the victim warm, quiet and under observation.

Avoid direct contact with this chemical. Move the victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen.

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes.

EMERGENCY RESPONSE:

Provide the local exhaust or process enclosure ventilation system.

Move all personnel perpendicular to windward side or towards higher elevation, as chlorine is 2.5 times heavier than air, and spreads on the ground, in no time.

Water should not be used directly on container for controlling leakage.

Immediately contact emergency personnel, as per Material Safety Data Sheet/ Transport Emergency Card. Or inform local Police/ Administration.