
HEALTH HAZARDS

HEALTH HAZARDS - Chlorine is an irritant to mucous membranes, eyes, and skin. It is toxic and corrosive. LC_{LO} Human - 500 ppm/5M, LC₅₀ Rat- 293 ppm/1 H, LC₅₀ Mouse -137 ppm/1 H, LC_{LO} Dog -800 ppm/30 M.

SIGNS AND SYMPTOMS OF EXPOSURE - Reported responses chlorine gas;

Concentration	Observation
0.02-0.2 ppm	Odor threshold
0.2-16 ppm	Mild mucous membrane irritation
7-8 ppm	Eye irritation
15ppm	Throat irritation
30 ppm	Cough
1000 ppm	Fatal after a few breaths

PRIMARY ROUTES OF ENTRY - Inhalation, Eyes

TARGET ORGANS - Respiratory tract, eyes

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE - No Information

EXPOSURE LIMITS – (ACGIH 2008): Chlorine 0.5 ppm, STEL 1.0 ppm

CARCINOGENICITY DATA - NIOSH RTECS, OSHA, NTP or IARC does not list component gases.

EMERGENCY AND FIRST AID PROCEDURES - Remove from exposure. If breathing has stopped, give artificial respiration. Administer oxygen. Consult a physician immediately.

SAFE HANDLING AND USE

HYGIENIC PRACTICES - Avoid breathing gas.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT - N/A*

PROCEDURES FOR SPILL OR LEAK CLEANUP - Ventilate area.

WASTE DISPOSAL - Do not puncture or incinerate cylinder. Before discarding cylinder, slowly release contents to a safe exhaust in accordance with applicable regulations regarding safety and the environment. Dispose of cylinder in accordance with local, state and federal regulations

STORAGE - Store in a cool, dry, well-ventilated area. Do not exceed 120°F.

N/A* - Not Applicable

CONTROL MEASURES

PERSONAL PROTECTIVE EQUIPMENT - Due to the limited amount of gas in the cylinder, and the low release rate employed in instrument calibration, respiratory protection is not indicated under conditions of intended use.

ENGINEERING CONTROLS - Mechanical ventilation is suitable.

WORK PRACTICES - Avoid breathing gas. Use in well-ventilated areas. Follow the calibration procedure detailed in the MSA instruction manual provided with the instrument under calibration.

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WARNING: This is a hazardous chemical product. By following the directions and warnings provided with this product, the hazards associated with the use of this product can be greatly reduced but never entirely eliminated. Mine Safety Appliances Company makes no warranties, expressed or implied, with respect to this product and EXPRESSLY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Users assume all risks in handling, using or storing this product.