



Hazard Risk Assessment

HYDROCHLORIC ACID

DESCRIPTION	Colourless liquid with pungent odour. Miscible with water. CAS: 7647-01-0. UN number: 1789.		
HEALTH HAZARDS	<p>IRRITANT: Irritating to the eyes, skin & respiratory system</p> <p>Eye contact with liquid causes pain and irritation.</p> <p>Exposure to high vapour/mist concentrations causes lung damage (pulmonary oedema) which may be fatal. Symptoms (coughing, shortness of breath) may be delayed for some hours after exposure ceases.</p> <p>Vapour irritates the eyes and respiratory tract. Liquid causes skin irritation and prolonged contact may cause burns and irritant dermatitis.</p> <p>Swallowing causes severe irritation and tissue destruction of the esophagus and digestive tract which may be fatal.</p> <p>Repeated exposure to high concentrations of acid mist causes dental erosion.</p>		
FIRST-AID	<p>Inhalation: Remove from source of exposure. If breathing stops or shows signs of failing apply artificial respiration. Use oxygen if breathing is laboured. Obtain medical help.</p> <p>Skin Contact: Remove contaminated clothing and flush affected area with water for at least 15 minutes. Treat patient as for inhalation. Obtain medical help.</p> <p>Eyes: Flood with eyewash or water for at least 15 minutes. Obtain medical help.</p> <p>Ingestion: Wash out mouth with water. Treat as for inhalation. Obtain medical help.</p>		
SAFETY HAZARDS	<p>REACTS VIOLENTLY with oxidising agents forming toxic gas (chlorine). REACTS with base metals forming combustible gas (hydrogen). INCOMPATIBLE with materials such as cyanides, sulphides, sulphites, and formaldehyde. A strong mineral acid reacting vigorously with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Store separately from oxidising materials.</p>		
FIRE	<p>NOT COMBUSTIBLE</p> <p>Heating produces corrosive fumes.</p>		
SPILLAGE	<p>Refer to local spillage/emergency procedures.</p> <p>Large spillage will generate corrosive mist on air contact which may require control with water fog/spray or alcohol resistant foam. Liquid can be absorbed using sand/proprietary adsorbent or transferred to a suitable container. Contaminated adsorbent should be transferred into a double polythene lined or other suitable container and disposed of as contaminated waste. Clean up spills immediately, observing precautions in the Exposure Controls section.</p>		
EXPOSURE CONTROLS CONTAINMENT LEVEL 2	<p>Refer to local procedures/risk assessment for details of personal protective equipment requirements. Eye Protection and Chemical Protective Clothing suitable for protection against liquids must be worn where there is risk of body contact. Respiratory Protective Equipment and Local Exhaust Ventilation may be required to protect against vapour.</p>		
OCCUPATIONAL EXPOSURE LIMIT	<p>Health & Safety Executive : Workplace Exposure Limit (Hydrogen Chloride) 8-Hour TWA : None 15 minute TWA : 5 ppm (7 mgm³)</p>		
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