HYDROGEN CHLORIDE

Chemical Information

- Colorless or slightly yellow, corrosive gas.
- Strong irritating odor.
- Forms hydrochloric acid with water.
- Forms dense white corrosive vapors with exposure to air.
- Highly corrosive with most metals (copper, brass, zinc, etc.)
- Forms flammable hydrogen gas when reacting with metals.
- Reacts quickly with hydroxides, amines, and alkalis, forming chlorine gas.

Common Uses

- Cleaning, metal pickling, electroplating metals, and tanning leather.
- Can be formed from the burning of plastics.

Hazards Identification

ACUTE EXPOSURE:

Inhalation

- Low levels of exposure can cause throat irritation.
- High levels of exposure can cause rapid breathing, narrowing of the bronchioles, blue coloring of the skin, and accumulation of fluid in the lungs.
- In extreme cases, swelling and spasm of the throat can occur resulting in suffocation.
- Depending upon the concentration of hydrogen chloride, mild irritation to severe burns can occur to eyes and skin exposed.

Ingestion

• Swallowing concentrated hydrogen chloride will cause severe corrosive injury to the lips, mouth, throat, esophagus, and stomach.

CHRONIC EXPOSURE:

- Long term exposure to low level can cause respiratory problems, eye and skin irritation, and discoloration of teeth.
- May result in the development of reactive airways dysfunction syndrome (RADS), a type of asthma caused by irritating and corrosive substances.



For assistance managing exposures to hazardous substances, please call North Carolina Poison Control at 1-800-222-1222.

In case of a life threatening emergency, dial 9-1-1 immediately.



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