

UNIVERSITY OF MANITOBA

In the Event of a Hydrofluoric Acid (HF) Injury

Skin Exposure:

HF is highly corrosive and burns are serious and highly painful.

Burns with concentrated HF are very serious with the potential for significant complications due to fluoride toxicity. Concentrated HF liquid or vapor may cause severe burns, metabolic imbalances, pulmonary edema and life threatening cardiac arrhythmias. Even moderate exposures to concentrated HF may rapidly progress to fatality if left untreated. Send this information sheet with the patient to the closest hospital (Victoria or Health Science Centre) with the MSDS and the “Honeywell medical Treatment Recommendations” if possible. Honeywell Medical Treatment recommendations are available at: http://www.honeywell.com/sites/sm/chemicals/hfacid/technical_documents.htm

Skin Contact

- **Move victim immediately under safety shower or other water source and flush area thoroughly with large amounts of running water. Speed and thoroughness in washing off acid is of primary importance.**
- **Be sure to wear surgical gloves to prevent a second contamination to the first aid provider.**
- **Begin flush even before removing cloths. Remove all contaminated clothing while flushing.**
- **If Calcium Gluconate gel are available, rinsing may be limited to 5 minutes with the gel applied as soon as the rinsing is stopped. If product is not available continue rinsing until medical treatment is rendered.**
- **While victim is being rinsed call Security Services 555 to obtain medical assistance.**
- **If Calcium gluconate gel is available, start applying and massage continuously until pain or redness disappears or until more definitive medical care is given. If burn to hands, fill a glove with gluconate gel and apply to hand for treatment during transport.**
- **Examine victim to be sure no burn sites are overlooked.**
- **Transport victim to closest hospital for treatment and send a copy of MSDS along with the “Honeywell medical Treatment Recommendations” if available.**
- **Treat for shock if necessary. Monitor Vital Signs.**

Eye Contact

- **Immediately flush eyes for at least 15 minutes with large amounts of gently flowing water. Hold eyelids open and away from eye during**

irrigation to allow thorough flushing of eyes. If person wearing contact lenses, remove *if possible*.

- While flushing call Security Services 555 to obtain medical assistance.
- If sterile 1% calcium gluconate solution is available, washing may be limited to 5 minutes after which the 1% calcium gluconate solution should be used repeatedly to irrigate eye using a syringe.
- Transport victim to closest hospital for treatment and send a copy of MSDS along with the “Honeywell medical Treatment Recommendations” if available.
- During transport, ice water compresses may be applied to eyes.
- If physician is not immediately available, the hospital can apply 0.5% tetracaine hydrochloride, 0.5% proparacaine or other aqueous topical ophthalmic anesthetic and continue irrigation. Use no other medications unless instructed by physician. Have patient avoid rubbing eyes.
- Treat for shock if necessary. Monitor Vital Signs.

Inhalation

- Immediately move victim to fresh air.
- Call Security Services 555 to obtain medical assistance.
- If breathing, administer oxygen as soon as possible.
- If a nebulized solution of 2.5% calcium gluconate is available it may be administered with the oxygen.
- If not breathing administer CPR. If available use a barrier. If there are burns to the victim’s lips or face do not do CPR without a barrier.
- Transport victim to closest hospital for treatment and send a copy of MSDS along with the “Honeywell medical Treatment Recommendations” if available.
- Treat for shock if necessary. Monitor Vital Signs.

Ingestion

- If the victim is conscious give large amounts of water as quickly as possible to dilute the acid. Do not induce vomiting. Do not give emetics or baking soda.
- Give several glasses of milk or several ounces of milk of magnesia, Mylanta, Maalox etc. or grind up and administer up to 30 Tums, Caltrate or other antacid tablets with water. (The calcium or magnesium in these components may act as an antidote.
- Transport victim to closest hospital for treatment & send a copy of MSDS along with the “Honeywell Medical Treatment Recommendations” if available.
- Treat for shock if necessary. Monitor Vital Signs.