

## Hydrofluoric Acid Emergency Procedures

Hydrogen fluoride and hydrofluoric acid exposures can result in severe, deeply penetrating burns to the eyes, lungs and skin. The concentrated form of these compounds is perceived by a burning sensation. However, exposure to dilute solutions may not result in a burn sensation for several hours. This time delay between exposure recognition and treatment can lead to burns that are difficult to treat or other systemic complications.

### **First aid must be started within seconds in the event of contact with Hydrofluoric Acid of any concentration!**

#### **Medical Assistance Information:**

**Seek medical attention at the SMH Emergency Department as soon as possible. Provide a copy of the Safety Data Sheet and this information sheet to the medical personnel. DO NOT ASSUME SELF-TREATMENT WITH CALCIUM GLUCONATE HAS BEEN SUCCESSFUL!**

ED personnel need to contact the Poison Center at 1-800-222-1222 to obtain the required specific treatment information. ED treatments may include (additional) topical administration of calcium gluconate 2.5% gel for skin exposures or an i.v. of calcium gluconate for systemic treatment.

**If you work with hydrogen fluoride or hydrofluoric acid, familiarize yourself with the following first aid procedures:**

#### **Skin Exposure to HF:**

1. Immediately flood the affected body part with cool water 15 minutes. Remove contaminated clothing and footwear while rinsing.
  - For hand and arm exposures, immediately wash affected area at a sink.
  - For the upper arms exposures, use a drench hose eye wash unit or safety shower.
  - For exposures of the torso or legs, use a safety shower.
2. If calcium gluconate gel is available, quickly dry the affected area and, using a glove, apply the calcium gluconate freely to the affected area to limit the migration and penetration of the fluoride ion. If calcium gluconate is **NOT** available, flood the affected body part with water for 15 minutes.
3. Call or have a co-worker call for medical assistance (Public Safety, x13) while the first aid occurs.
4. Inform emergency medical responders (depending upon the location, either a MERT responds or an ambulance) that the exposure involved hydrogen fluoride/hydrofluoric acid. Provide a copy of the Safety Data Sheet to the responders.
5. Should medical attention take more than 15 minutes, reapply and massage the calcium gluconate gel freely into affected area of the skin every 15 minutes until medical attentions occurs.

#### **Eye or Inhalation Exposure to HF:**

1. Flush eyes with plenty of cool tap water for 15 minutes. **NEVER** apply calcium gluconate gel to the eyes.
2. Move inhalation exposure victim to clean air.
3. Call or have a co-worker call for medical assistance (Public Safety, x13).
4. Wait for emergency medical responders, informing them that the exposure involved hydrogen fluoride / hydrofluoric acid. Provide a copy of the Safety Data Sheet to the emergency responders.