Hydrogen chloride gas is a chemical compound comprised of hydrogen and chlorine. It is a by-product of a process that WACKER uses to produce polysilicon for the photovoltaic or solar energy industries and for use in microelectronics.

A colorless gas, hydrogen chloride, if accidentally released into the atmosphere, may form a visible, fog-like cloud. When mixed with water, including moisture in the air, will form hydrochloric acid, a corrosive compound.

Hydrogen chloride gas is nonflammable.

Hydrogen chloride gas has a sharp, disagreeable odor, even at low levels of concentration.
Possible effects of exposure and first aid
The possible effects of exposure to hydrogen chloride gas or hydrochloric acid are listed in the following table. Actual effects will vary depending on the duration of exposure, concentration levels and an individual’s particular age or physical condition.

<table>
<thead>
<tr>
<th>Potential Effects</th>
<th>How to Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>With eyes held open as much as possible, immediately flush with cool or lukewarm water for 15 minutes; seek immediate medical attention.</td>
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<tr>
<td>Skin</td>
<td>Immediately flush skin area with cool or lukewarm water for 15 minutes; seek immediate medical attention.</td>
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<tr>
<td>Respiratory</td>
<td>Seek fresh air and immediate medical attention.</td>
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<tr>
<td>Oral</td>
<td>Do not induce vomiting. Immediately seek medical attention.</td>
</tr>
</tbody>
</table>

How do I shelter-in-place?
In the event of an airborne release of hydrogen chloride gas, it is recommended individuals follow the shelter-in-place procedure described at right. Properly following these steps can safely protect people and animals when the “all clear” is sounded.

1. Take shelter inside the nearest building.
2. Close all doors and windows.
3. Turn off all fans, air conditioners, furnaces and pilot lights.
5. Go to an interior room on the ground floor or upper level. Do not go to lower or basement areas – HCl vapors are heavier than air.
6. If traveling in a vehicle, safely find the nearest area to park and turn off the engine. Close all doors, windows and vents, and turn off the fan.
7. Stay inside and wait for the “all clear” to sound. Listen to local television or radio for further instructions.

After the “all clear”
- People who experience any suspected irritation or other medical problems as a result of exposure should seek immediate medical attention.
- Adults, children and pets may go outside. As a precaution, normal bathing with soap and water is recommended.
- Windows, dampers and vents should be opened to air out the building. Heating or air conditioning systems can be used safely.
- Fruits and vegetables from gardens should always be washed thoroughly before eating.
- Trees, shrubs and lawns near the release may eventually discolor or show other effects of exposure. Thorough rinsing of exposed surfaces with water may minimize these effects.
- Rivers, streams, ponds and swimming pools should be unaffected.