## Hydrofluoric Acid.

Reducing the risk of human exposure.



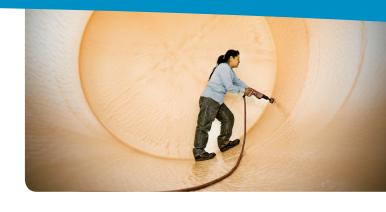
Used in the production of aluminum, fluorocarbons and gasoline and for applications like glass etching and uranium processing, hydrofluoric acid is an extremely dangerous chemical that must be handled with the utmost care.

- This corrosive liquid penetrates tissue more quickly than typical acids. Toxicity can occur through dermal, ocular, inhalation and oral routes.
- Since HF alters nerve function, accidental exposure can go unnoticed by the victim, delaying treatment and increasing the extent of injury.
- It can also be absorbed by the blood through the skin, reacting with blood calcium and potentially causing a heart attack.

The extreme nature of this chemical calls for superior structural integrity – the level of integrity Poly Processing is known for.



# The Poly Processing Hydrofluoric Acid System.



When people's lives are at risk, you can take no chances. You need a system that goes above and beyond to prevent contact with this corrosive acid. That system starts with a crosslinked polyethylene tank. XLPE is a thermoset resin that gives customers **20 times the environmental stress-crack resistance, 10 times the molecular weight and 5 times the impact and tensile strength of HDPE**. This system carries a warranty for a full five years.

A SAFE-Tank<sup>®</sup> can help **reduce health and environmental concerns** due to closed containment of hydrofluoric acid. If a SAFE-Tank<sup>®</sup> is not a possibility, an IMFO<sup>®</sup> flange can be used to **reduce hands-on maintenance**, thereby reducing the risk to your employees.

CHEMICAL	RESIN	SPECIFIC GRAVITY	FITTING	GASKET	BOLT
	TYPE	RATING	MATERIAL	MATERIAL	MATERIAL
Hydrofluoric Acid	XLPE	1.9	PP	Viton <sup>®</sup>	C-276

»» See our website for a complete Chemical Resistance Chart.

### Tank Specifications & Technical Overview

#### IMFO® VERTICAL FLAT BOTTOM OF XLPE:

- 230-13,650 gallons
- 1.9 spg rating

#### NON-IMFO® ALTERNATIVES:

#### SAFE-Tank® XLPE:

- 55-8,700 gallons
- 1.9 spg rating for primary tank
- Spg ratings for secondary tanks ≥ 3,000 gallons may be equal to or 1 less spg than primary tank.
- All other tank sizes must equal primary tank spg rating.

#### Standard Vertical Flat Bottom XLPE:

- 30-13,650 gallons
- 1.9 spg rating

**Alternative secondary containment:** PPC secondary containment basin or other secondary containment suitable for hydrofluoric acid, of adequate size for use

**Plumbing:** Requires use of flexible connections with fittings on lower third of sidewall. See page 54 for flexible connections options.

Venting: See chart on page 63.

**Foundation:** PPC IMFO® tank pad or smooth concrete, asphalt or steel foundation designed to accommodate IMFO®, SAFE-Tank® or vertical tank

**Temperature:** Product should not exceed 100°F at delivery or during storage to maintain ASTM D1998 design parameters.

Lid: Fume-tight manway cover to manage release of chemical gases

**Options:** Restraint systems for wind and seismic, level gauges, ladders, heating pads, insulation, mixer mounts and engineering stamp

The above components are just a few of the many options offered by Poly Processing. See pages 38–63 for additional information and products, or talk to your Poly Processing representative.