

Recommendations for Storage Of Hydrochloric Acid < 37%

- Tank: Crosslink Polyethylene. Tank must be rated at a minimum of 1.9 Specific Gravity.
- Fitting material: PVC, CPVC or Hastelloy C-276 for nozzles.
- Gaskets: VITON material.
- Bolting hardware: Hastelloy C-276.
- Special Considerations: Bolted and Gasket manway cover recommended

- Secondary containment: End user should check local regulations to meet secondary containment requirements. Containment must be adequate in capacity and suitable for Hydrochloric Acid. By accepting the delivery of the tank the customer accepts full responsibility for providing appropriate and adequate containment for the stored material. Assmann Corporation offers a variety of secondary containment basins.

- All connections below liquid level must prevent chemical from contacting tank wall cross section. Bulkhead style connections can be used on tanks 2000 gallons and below. Tanks above 2000 gallons sidewall connections should be Hastelloy C-276 construction. (Flange style fittings are not recommended). Sidewall connections should be installed a minimum of 7" above the tank floor. Internal siphon drains can be used if required. Sidewall connections should be kept to a minimum amount and should be placed no closer than 22 degrees apart. Whenever possible, sidewall connections should not be greater than 3". There are no restrictions on dome fittings.

- Flexible hoses or Expansion Joints must be used on all lower ½ sidewall connections. A light weight isolation valve is permitted prior to the flexible joint. Nipple and valve weight must not exceed (8-Lbs.) All piping must be supported independent of tank. Pipe supports must be installed after the flexible joint, to allow the tank to expand and contract under normal service conditions. Polyethylene tanks expand and contract both laterally and vertically; expansion hose or joint must accommodate for this expansion.

- Tank must maintain atmospheric pressure. Vents must be sized for a minimum of two times the largest inlet or outlet port for pneumatically filled tanks. Pump fill tank's vent should be a minimum of one and a half times larger than the largest fill or discharge point. Tanks vented through a scrubber system, the vent size cannot be reduced passing through the scrubber. If a dispersion pipe is used in the scrubbing system, the pipe should not be submersed in more than 6" of liquid. A perforated dispersion pipe must allow for the same cross-sectional area of the pipe to prevent vent restriction. ***Under no circumstances should tank be placed under pressure or vacuum conditions.***

- Hydrochloric Acid must not exceed 100 degrees F at delivery or during storage. When practical, tanks should be kept from direct sunlight to avoid excessive heat.

- Deliveries must be regulated. Maximum delivery pressures must not exceed 12 PSI. Ideally Hydrochloric Acid fumes should be vented back into delivery truck during offloading of chemical. If fume scrubbing system is being used, be sure that airflow through system is adequate to keep up with delivery pressure and airline surge. ***Under no circumstances should tank be placed under pressure or vacuum conditions.***