

# TANK HANDLING, INSTALLATION & USE GUIDELINES

Although Chemtainer's tanks are extremely durable, improper handling and installation can result in damage to tank, fittings, and accessories. Failure to comply with handling and installation instructions voids all warranties.

1. At delivery, inspect your tank immediately for defects or shipping damage. Any discrepancies, or product problems, should be noted on both the driver's bill of lading and your packing list.

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2. When unloading your tank from the delivery truck, avoid its contact with sharp objects. Forklift blades can cause significant damage if proper precautions are not taken. Do not allow tanks to be rolled over on the fittings. Large bulk storage tanks, whenever possible, should be removed from truck bed by use of a crane or other suitable lifting device. OSHA regulation 29CFR 1910.178 through 1910.189 addresses specific standards for hoisting and lifting. Keep unloading area free of rocks, sharp objects, and other materials that could damage the tank. If tank is unloaded on its side, carefully brace to prevent rolling.
3. Support bottom of tank firmly and completely. Concrete pads provide the best foundation. The pad should be clean, smooth, and level so it fully supports the entire tank bottom with no deflection. However, when seismic and wind factors are not being considered, tanks with a base load bearing of less than 800 pounds per square foot require a firm, even, compacted bed of sand, pea gravel, or fine soil that won't wash away. Tanks with a base load bearing of 800 pounds per square foot, or greater, require a reinforced concrete base. Steel support stands concentrate the loaded tank weight onto the stand leg pads. It is recommended that stands are mounted on a concrete base. Bolting of stands is necessary to prevent movement due to agitation, wind, seismic loads and accidental contact.
4. Install tanks in an area that is accessible. Ease of maintenance and removal should be considered.
5. Test by filling tank with water prior to use, to prevent material loss through unsecured fittings, shipping damage, or manufacturing defects. Tanks should be tested for a minimum 5 hours.
6. Plastic screw on bulkhead fittings are designed to be hand tightened. Overtightening can cause fittings to leak.
7. Support sides of rectangular tanks. In general, tanks with heights greater than 18" must be supported. However, specific applications must be considered: smaller

tanks with contents that have high specific gravity and/or elevated temperatures must be supported.

8. Do not mount heavy equipment on tank sides.
9. Do not allow weight on tank fittings. Fully support pipes and valves.
10. Use expansion joints to prevent damage at fittings from the differential expansion and contraction of the piping and tanks.
11. Tanks are designed for use only in the atmospheric storage of chemicals, never for vacuum or pressure applications.
12. Immersion heaters should never touch the walls of the tank. Minimum spacing should be 3" - 4" from wall.
13. Refer to the chemical capability chart on this site as a guide. Be certain tank, fittings, and fitting gasket material are compatible with chemicals at the anticipated operating temperatures. Contact our technical staff for information on chemicals not listed, or when uncertain conditions exist.
14. Protect tanks from impact, especially at temperatures below 40 degrees F.
15. Confined spaces must be considered hazardous. Do not enter tank without first taking proper precautions.
16. Tank sizes as listed are nominal and calibrations on molded tanks are only approximates, but provide an indication of volume. Polyethylene tanks expand and contract which will effect volume. The degree in which this occurs depends on the size of the tanks, wall thickness, specific gravity of contents, temperature of contents and ambient temperatures.

Chem-Tainer **1-800-275-2436**