

Procedures for Disinfection of Storage Tanks

1. Drain tank and clean it thoroughly to remove loose debris and dirt.
2. Fill the tank with water to one foot in depth.
3. Add hypochlorite solution to the tank. The amount of hypochlorite added to the tank should be sufficient to achieve a minimum 10 mg/l free chlorine residual in the water when the tank is filled to its normal operating level. The values given in the table below can be used to determine how much hypochlorite to add. If the water has a higher than normal chlorine demand (such as waters with high iron or manganese, hydrogen sulfide or color), use the amount listed to achieve a 20 mg/l dosage.

Amount of sodium hypochlorite for 10,000 gallons of water

Adjust the quantity to fit your tank size

(Volumes are approximate and have been rounded to an even measurement quantity)

Target chlorine concentration (mg/l)	5.25 % chlorine	12.5 % chlorine
2	0.5 gallons	1 quart
10	2 gallons	1 gallon
20	4 gallons	1.75 gallons
50	10 gallons	4 gallons

4. Fill tank to its normal operating level and allow to sit full for 24 hours.
5. Once the free chlorine residual has reached a level of less than or equal to 2.0 mg/l, draw a sample from the tank and have it tested for the presence of total coliform bacteria. If the test for coliform bacteria is negative, the storage tank may be placed back into service.

Note: To reduce the free chlorine level to 2.0 mg/l it is often necessary to add a chemical dechlorination agent such as sodium bisulfate to neutralize the chlorine. As an alternative, the water in the tank may be disposed of and the tank refilled. However, the chlorine residual should be reduced to as close to zero as practical before disposing of the water. Disposal of chlorinated water by draining it into a surface water is illegal.

Table showing amount of hypochlorite to achieve a 1 mg/l chlorine dosage.

Choose the correct amount based on the strength of the hypochlorite you are using and the amount of water to be treated.

Tank Volume (gallons)	5.25 % Hypochlorite		12.5% Hypochlorite	
	Ounces	Gallons	Ounces	Gallons
500	2		0.5	
1,000	3		1	
2,000	5		2	
3,000	8		4	
4,000	11		5	
5,000	13	0.1	6	
10,000	25	0.2	11	0.08
20,000	51	0.4	21	0.17
30,000	76	0.6	32	0.25
40,000	102	0.8	43	0.33
50,000	127	1	53	0.42
100,000	254	2	107	0.83