

# Sodium Hypochlorite (NaOCl) Storage Tanks for 9 – 15 wt %

**Tank:**

**IMFO® TANK of crosslinked polyethylene with OR-1000™, 1.9 spg rating**

- Provides full drainage to prevent sludge build up

Non IMFO® alternative:

- Vertical, flat-bottom tank, crosslinked polyethylene with OR-1000™, 1.9 spg rating

Black or white color or insulation with mastic coating **required** in outdoor applications to minimize bleach degradation.

**Secondary Containment: REQUIRED**

Alternatives:

- PPC secondary containment basin of crosslinked polyethylene
- Other secondary containment suitable for sodium hypochlorite and of adequate size

**Fittings:**

Sidewall:

- 3" maximum size on the lower 1/3 sidewall
- Fitting must keep sodium hypochlorite from contacting tank wall cross section

Dome: No restrictions

Fitting Material of Construction:

- PVC & CPVC (schedule 80), titanium
- DO NOT use stainless steel or Alloy C-276 because nickel content contributes to the decomposition of sodium hypochlorite

Gasket Material of Construction: Latharge Viton or EPDM

**Plumbing to the tank:**

Required use of **flexible connections** with fittings on lower 1/3 of sidewall

- Allows for lateral and vertical expansion and contraction of the tank
- Reduces pump and piping vibration stress on the tank, fittings, and gaskets

Flexible connections, piping, and valves must have structural support independent of tank sidewall and dome

**Venting:**

Venting Requirements For Polyethylene Tanks									
Mechanical Pump Fill	Pneumatic Fill								
IF ≤ 1000 gallons	IF - Vent length ≤ 3 feet			IF - Vent length > 3' and ≤ 30'			IF - Scrubber Application		
Vent size should equal size of largest fill or discharge fitting	AND - Vent screen mesh size ≥ 1/4" or no screen used			AND - 3 or less 90° elbows with no other restrictions or reduction in pipe size			Vent pipe size throughout scrubber system <b>CANNOT</b> be reduced!		
							Centerline of dispersion pipe not to be submersed > 6 inches		
IF > 1000 gallons	Emergency Pressure Relief Cover Required			Emergency Pressure Relief Cover Required			Perforated dispersion pipe must be same diameter or larger, as vent. Sum of perforations ≥ cross sectional area of pipe		
Vent size should exceed the largest fill or discharge fitting by 1 inch	Tanker Discharge	Inlet/Fitting Size	Minimum Vent Size	Tanker Discharge	Inlet/Fitting Size	Minimum Vent Size	Tanker Discharge	Inlet/Fitting Size	Minimum Vent Size
	2"	2"	4"	2"	2"	6"	2"	2"	6"
	3"	2"	6"	3"	2"	6"	3"	2"	8"
	3"	3"	6"	3"	3"	8"	3"	3"	10"

(2) 2 inch vents **DO NOT EQUAL** 4 inch venting capacity

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For detailed venting guidelines, please visit our Technical Resources at [www.polyprocessing.com](http://www.polyprocessing.com)

**Foundation and Restraints:**

PPC IMFO® tank pad or smooth concrete, asphalt, or steel foundation designed to accommodate IMFO®

No restraint or ladder attachment bands circumscribing the tank are allowed; cable restraint systems must pass cables over the top of the tank or utilize molded-in lifting lugs when appropriate.

**Temperature:**

Product should not exceed 100 degrees F at delivery or during storage to reduce decomposition of the sodium hypochlorite

**CAUTION!**

The life of a tank is affected by the quality of the sodium hypochlorite stored. Tank owners are cautioned to **use high quality sodium hypochlorite** with low iron, nickel, and copper content. These metals contribute to the decomposition of the sodium hypochlorite and accelerate the oxidation and degradation of the tank.