

# Wallace & Tiernan® Chlorine Dioxide Generation Systems

## Sodium Hypochlorite 12.5% Co-Reactant

Sodium Hypochlorite 12.5% solution is specified as a co-reactant for the generation of chlorine dioxide solutions using Wallace & Tiernan® three-chemical generating systems utilizing 25% Sodium Chlorite as the chlorine dioxide precursor. All Sodium Hypochlorite 12.5% used as a co-reactant in Wallace & Tiernan® chlorine dioxide generators must meet the minimum specifications described under physical properties. Sodium Hypochlorite 12.5% that does not meet these specifications SHOULD NOT be used in Wallace & Tiernan® chlorine dioxide generating systems.

### Typical Physical Properties

Appearance	Clear, greenish-yellow liquid
Odor	Slight chlorine odor
Solubility in Water	Complete
Specific Gravity	1.20 at 25°C (77°F)
Vapor Pressure	Approximately 17.5 mm Hg at 20°C (68°F)
Boiling Point	100°C (212°F) decomposes
% Volatile	Approximately 76%
pH (as supplied)	> 13

### Specifications

NaOCl, (wt %)	12.5 min.
NaOH, (wt %)	1.0 max.
Available Chlorine (wt %)	12.0 min.
Available Chlorine (vol %)	14.5 min.
Iron, mg/L	0.5 max.
Copper, mg/L	0.07 max.
Nickel, mg/L	0.01 max.
Zinc, mg/L	0.15 max.
Bromate Ion (wt %)	0.00417

### Typical Application

- Generation of chlorine dioxide

### Typical Feed Requirements

Sodium Hypochlorite 12.5% is used in conjunction with other chlorine dioxide precursors to generate chlorine dioxide. Sodium Hypochlorite 12.5% solution must be used only in conjunction with approved chlorine dioxide generation equipment and in accordance with the operating instructions of the generator.

For additional treatment information, including dosage specific to your application, please contact your Siemens representative.



## Product Sheet

## Storage and Handling

Store in a cool, dry, well-ventilated place away from heat, cold, direct sunlight, ammonia containing compounds, and/or acids. Protect from freezing. Always use care when opening containers and keep tightly closed when not in use. Do not reuse containers.

Sodium Hypochlorite 12.5% is corrosive. Wear personal protective equipment, such as goggles or safety glasses, gloves and other protective clothing when handling.

See Material Safety Data Sheet for additional safety information before storing or handling Sodium Hypochlorite 12.5%.

## Packaging

Sodium Hypochlorite 12.5% is typically available in 55-gallon drums, totes, and in bulk quantities. For further information, please contact your Siemens representative.

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