

# Wallace & Tiernan® Chlorine Dioxide Generation Systems

## Hydrochloric Acid 5% Co-Reactant

Hydrochloric Acid 5% solution is specified as a co-reactant for the generation of chlorine dioxide solutions using Wallace & Tiernan® three-chemical generating systems for capacities of less than 140 pounds per day utilizing 7.5% Sodium Chlorite as the chlorine dioxide precursor. All Hydrochloric Acid 5% used as a co-reactant in Wallace & Tiernan® chlorine dioxide generators must meet the minimum specifications described below. Hydrochloric Acid 5% that does not meet these specifications SHOULD NOT be used in Wallace & Tiernan® chlorine dioxide generating systems.

### Typical Physical Properties

Appearance	Clear, colorless liquid
Odor	Pungent, irritating odor
Solubility in Water	Complete
Specific Gravity	1.025 at 25°C (77°F)
pH (as supplied)	< 1

### Specifications

Hydrogen Chloride Assay, wt. % as HCl	not < 97.0% or > 103.0% of labeled amount
Iron, mg/Kg	5
Heavy metals (as Pb), mg/Kg	1
Color	Passes test
Nonvolatile Residue	Not more than 0.5%
Total Organics (Non-Fluorine-containing) mg/Kg	5
Oxidizing Substances, (as Cl <sub>2</sub> )	0.003%
Reducing Substances (as SO <sub>3</sub> ) 0.	007%
Sulfate	no more than 0.5%

Meets requirements of the Food Chemicals Codex, Fourth Edition

### Typical Application

- Co-reactant for generation of chlorine dioxide

### Typical Feed Requirements

Hydrochloric Acid 5% solution is used in conjunction with other chlorine dioxide precursors to generate chlorine dioxide. Hydrochloric Acid 15% 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 closed, properly labeled, rubber-lined steel, acid-resistant plastic, or glass containers. Store in a cool, dry, well-ventilated place away from heat, cold, metals, strong oxidizing agents, strong alkalis or reactive materials. Protect from freezing. Always use care when opening containers and keep tightly closed when not in use. Do not reuse containers.

Hydrochloric Acid 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 and handling information before storing or handling Hydrochloric Acid 15%.

## Packaging

Hydrochloric Acid 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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