Sodium Hypochlorite Incompatibility Chart

Do NOT mix Sodium Hypochlorite (bleach) with ANY other chemical unless adequate engineering controls and personal protective equipment (PPE) are in place. Accidental mixing may cause dangerous conditions that could result in injury to personnel and/or damage to property or the environment.

Incompatible Material	Mixing May Result In
Acids, Acidic Compounds and Acid Based Cleaning Compounds such as: - Alum (Aluminum Sulfate) - Aluminum Chloride - Ferrous or Ferric Chloride - Ferrous or Ferric Sulfate - Chlorinated Solutions of Ferrous Sulfate - Hydrochloric Acid (HCl) - Sulfuric Acid - Hydrofluoric Acid - Fluorosilicic Acid - Phosphoric Acid - Brick and Concrete Cleaners	- Release of chlorine gas, may occur violently.
Chemicals and Cleaning Compounds containing ammonia such as: - Ammonium Hydroxide - Ammonium Chloride - Ammonium Silicofluoride - Ammonium Sulfate - Quaternary Ammonium Salts (Quats)	- Formation of explosive compounds. - Release of chlorine or other noxious gases.
Organic Chemicals and Chemical Compounds such as: - Solvents and Solvent Based Cleaning Compounds - Fuels and Fuel Oils - Amines - Propane - Organic Polymers - Ethylene Glycol - Insecticides - Methanol	- Formation of chlorinated organic compounds. - Formation of explosive compounds. - Release of chlorine gas, may occur violently.
Metals such as: - Copper - Nickel - Cobalt - Iron Avoid piping and material handling equipment containing stainless steel, aluminum, carbon steel or other common metals.	- Release of oxygen gas, generally does not occur violently. Could cause overpressure/rupture of a closed system.
Hydrogen Peroxide	- Release of oxygen gas, may occur violently.
Reducing agents such as: - Sodium Sulfite - Sodium Bisulfite - Sodium Hydrosulfite - Sodium Thiosulfate	- Evolution of heat, may cause splashing or boiling.

The Chlorine Institute has available for $25 a 30-minute videotape, Handling Sodium Hypochlorite Safely. Pamphlet 96, Sodium Hypochlorite Manual, also is available. See the "Publications" section of the Institute's Internet web site, www.CL2.com, for ordering information or contact the Publications Department, 202-775-2790.