







Chemical Incompatibility with Bleach (Sodium Hypochlorite)

Incompatible Chemicals and Agents

Results

<p>Acids and Acidic Compounds such as:</p> <p>Hydrochloric Acid Aluminum Sulfate Sulfuric Acid Aluminum Chloride Hydrofluoric Acid Ferrous or Ferric Chloride Nitric Acid Ferrous or Ferric Sulfate Phosphoric Acid (including chlorinated solutions)</p>	 <p>Release of chlorine gas which may occur violently</p> 
<p>Ammonia-containing chemicals/compounds such as:</p> <p>Ammonium Hydroxide Quaternary Ammonium Salts Ammonium Chloride Ammonium Silicofluoride Ammonium Sulfate</p>	<p>Formation of explosive compounds</p> <p>Release of chlorine gas or other hazardous gases</p>
<p>Organic chemicals such as:</p> <p>Organic solvents Insecticides Organic polymers Fuels and fuel oils Amines Propane Ethylene Glycol Methanol</p>	<p>Formation of explosive compounds</p> <p>Release of chlorine gas</p> <p>Formation of chlorinated organics</p> 
<p>Reducing agents such as:</p> <p>Sodium Bisulfite Sodium Sulfate Sodium Hydrosulfate Sodium Thiosulfate</p>	<p>Production of heat from reaction which may cause boiling and splashing</p> 
<p>Guanidine Salts such as:</p> <p>Guanidine Hydrochloride Guanidine Thiocyanate (found in many lysis buffers)</p> 	<p>Release of toxic gases which can include chloramines, chlorine, and hydrogen cyanide.</p>
<p>Metals such as:</p> <p>Cobalt Nickel Copper Iron</p> <p>Avoid piping and equipment containing aluminum, carbon steel, stainless steel, and other metals.</p> 	<p>Release of oxygen which could cause overpressurization and rupture of a closed system.</p>
<p>Hydrogen Peroxide</p>	<p>Release of oxygen which may occur violently</p>

Always check a chemical's Safety Data Sheet before adding bleach.
 Never mix bleach with an unknown compound or mixture.