

Islamic Azad University-Ahar Branch
The Application of Chemistry in Environment

Neutralization of Sarin Chemical Warfare

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Abstract

Sarin chemical warfare has been neutralized by solution of sodium hydroxide, sodium carbonate and potassium hydroxide at room temperatures and pH of 13. The hydrolysis of sarin is increased by increasing of pH, and it is strongly depends on pH. The hydrolysis reaction of sarin is as follows:

$$H_3C$$
 $CH - O - P$
 H_2O
 $NaOH, Na_2CO_3, KOH$
 $PH = 13$
 $HF + NaOH$
 $NaF + H_2O$
 CH_3
 $HF + NaOH$
 $NaF + H_2O$

Keywords: Sarin, Chemical warfare