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Comparison Of Decontamination Rates And Products Of Chemical Agents Through Reaction With Various Homogeneous Solutions

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Chemical warfare agents (CWAs) are chemical substances whose toxic properties are used to kill, injure or incapacitate human beings. Thus, decontamination, aimed at eliminating the hazard of CWAs, is important and required on the battlefield as well as in laboratories, plants, and chemical agent storage and destruction sites. Many kinds of materials have been developed for decontamination, and their decontamination efficiencies have also been reported in various academic fields. However, since the decontamination efficiency of each material has been evaluated under different reaction conditions so far, it is still difficult to directly compare their performance and determine the superiority. In this study, we analyzed the rates and products of reactions between CWAs and several homogeneous solutions under the same conditions to compare the decontamination performance of the liquid materials. The details will be presented.