

Evaporation of the Vesicant Chemical Warfare Agent Sulfur Mustard from Glass

정현숙*, 박명규, 류삼곤, 명성민
국방과학연구소
(hsj1974@gmail.com*)

Evaporation of highly toxic chemical warfare agents (CWAs) from surfaces is a possible threat upon chemical attack by terrorists or military organizations. To be prepared for the event, it is crucial to understand the evaporation process of CWAs. We investigated the evaporation rate of the vesicant chemical warfare agent sulfur mustard (bis(2-chloroethyl)sulfide, abbreviated HD) from a non-porous, non-interacting glass surfaces under various environmental condition (temperature, wind speed, and relative humidity). We used a laboratory-sized wind tunnel in conjunction with gas chromatograph mass spectrometry (GC/MS). The results and perspectives will be discussed.