

Abstract Submitted
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The Spread and Absorption of Chemicals on Military Relevant Materials¹ SARA KETTERER, Primary Researcher, DEBRA PRATT, Researcher, HOMAYUN NAVAZ, Director, MICHAEL HERMAN, YURI SIKORSKI, Supervisor, ALI ZAND, Primary Supervisor — The spread of chemicals in the environment poses great danger to natural ecosystems. The rate and the diameter of chemical spread on various surfaces were measured. These spread properties were correlated to the surface roughness as well as viscosity and surface tension of liquid chemical. Surface Imagery was obtained using optical and traditional profilometers. The roughness measurements were used along with rate of spread to develop a mathematical model. ESEM (Environmental scanning electron microscope) was utilized to understand how the chemicals adsorb to the surface of the paints. This investigation seeks to determine how surface and chemical properties affect the spread. The results of our investigation will be presented.

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