

## Detection of Chemical Warfare Agents on Surfaces

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The feasibility of using DART to detect chemical weapons agents has been demonstrated in preliminary studies with several members of G, V, and HN-series agents. American VX was applied to a porous concrete sample. It is readily detected after a few seconds as the protonated

molecular cation with an excellent signal-to-noise ratio of 100,000 (Figure 1). Less than a microgram was applied. Other surfaces were also examined with the same success; these include a bird feather, asphalt, aluminum, etc. DART testing of other substances was equally successful.

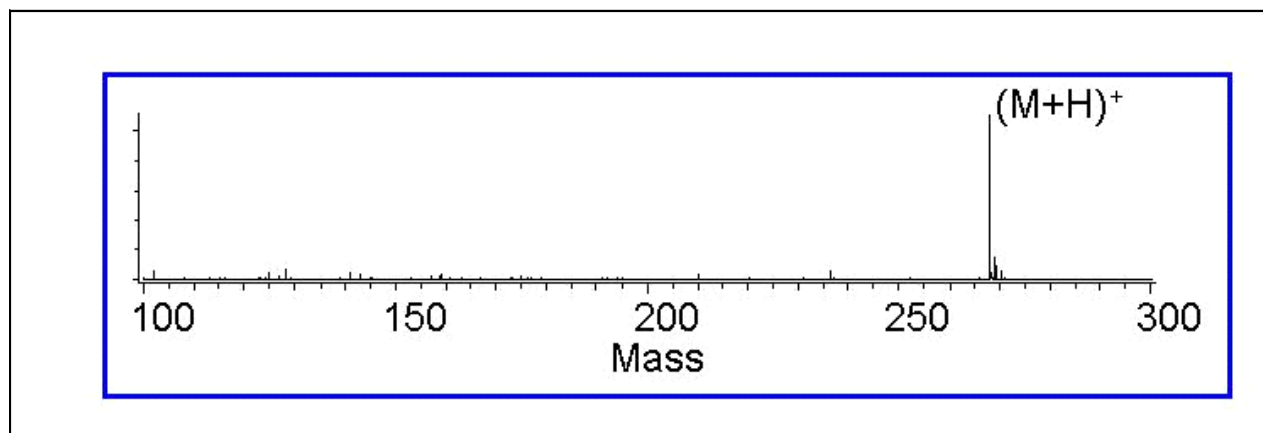


Figure 1. 788 nanograms of American VX detected on Concrete.