Nitromethane was adsorbed onto various salt films and subjected to ultraviolet light. The products formed due to the photolysis of adsorbed nitromethane have been determined through examination of the resulting IR spectra. The resulting peaks exhibited in the absorption spectra were compared to assigned peak values in the literature. The spectral peaks were analyzed in order to determine the desorption which took place, as well as to determine the rate constants of desorption, k, calculated for each peak. The thermal desorption of the adsorbate was followed as a function of temperature in order to determine the activation energy of desorption.