Supporting Material for
Hydroxyacetone Production From C_3 Criegee Intermediates

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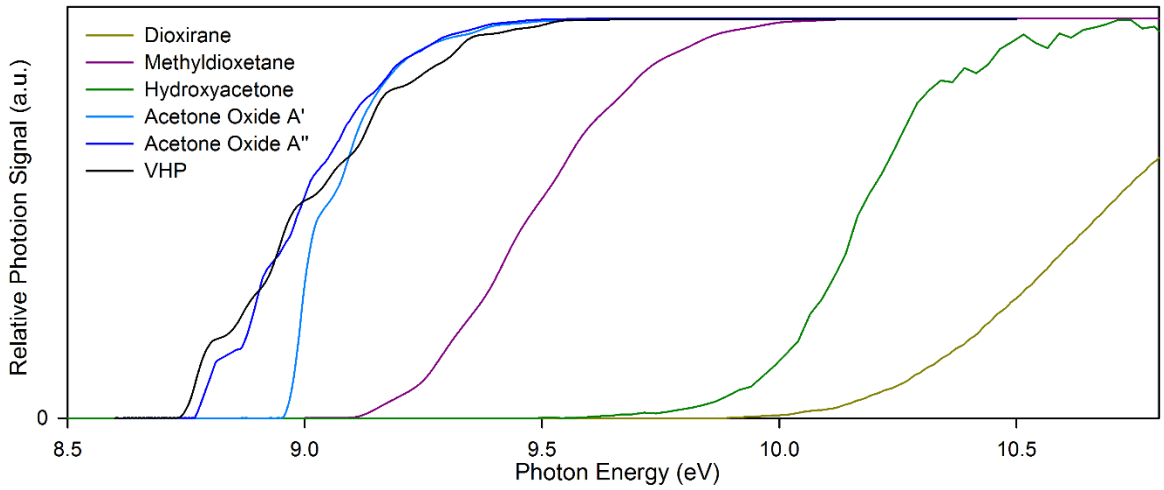

Figure S1. Relative photoionization spectra of several possible isomers at m/z = 74, normalized to the same asymptotic value at high photon energy. Experimental spectrum for hydroxyacetone is compared with computed spectra for acetone oxide, VHP, methyldioxetane, and dimethyl dioxirane adapted from Chhantyal-Pun *et al.*[1]

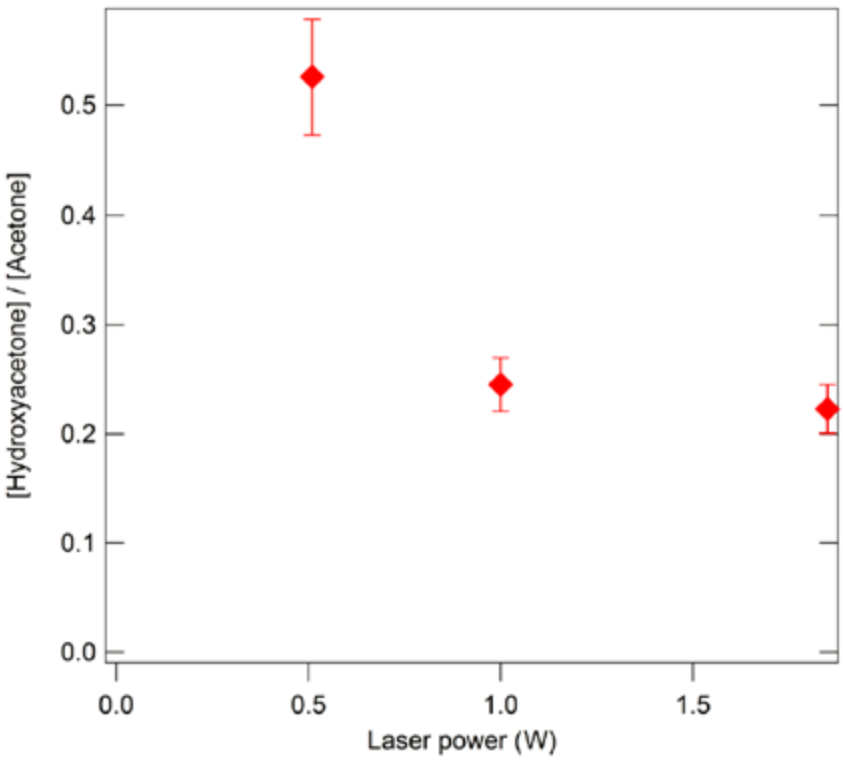

Figure S2. The ratio of hydroxyacetone (m/z = 74) to acetone (m/z = 58) products upon photoionization at 10.5 eV, after accounting for the absolute cross sections of both species, at various photolysis laser powers. The fraction of $(CH_3)_2COO$ removal by self-reaction increases with increasing incident laser power.

References

1. Chhantyal-Pun, R., et al., Direct Measurements of Unimolecular and Bimolecular Reaction Kinetics of the Criegee Intermediate $(CH_3)_2COO$ **2016**, *accepted for publication*. DOI: 10.1021/acs.jpca.6b07810.