

Interactive comment on “Evaluated kinetic and photochemical data for atmospheric chemistry: Volume VIII – gas phase reactions of organic species with four, or more, carbon atoms ($\geq C_4$)” by Abdelwahid Mellouki et al.

Anonymous Referee #2

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As stated in the abstract, this is the eight overview article published in ACP on the detailed evaluation work carried out by the IUPAC Task Group on Atmospheric Chemical Kinetic Data Evaluation, focusing on the gas phase reactions of organic species with four, or more, carbon atoms. The work carried out by this group is of critical importance to the atmospheric chemistry community, where these evaluations drive our current understanding of tropospheric and stratospheric chemistry represented in the chemical mechanisms that underpin all air quality and climate science and policy models.

This overview article summarises the datasheets and recommendations on the reac-

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tions of selected tropospherically important $\geq C_4$ closed-shell organic species with HO and NO₃ radicals, and their photolysis. The datasheets and recommendations discussed are available, along with recommendations of other atmospherically important gas, heterogeneous and aqueous phase reactions on a dedicated webpage, which is updated periodically. The article itself is a well written and clear summary which certainly should be published in ACP. One suggestion is that it would be useful to the reader if an additional table is added which summarises the range of VOCs covered, e.g. how many alkanes, alkenes, aromatics, oxygenated species, organic nitrates and nitro compounds, etc. . . , with the supplementary datasheets logically ordered as appropriate.

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