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The Ozonolysis of Cyclic Monoterpenes: A Computational Review

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Fig. 1 Structures of selected monoterpenes.

Fig. 2 SOA formation from interactions of monoterpenes with oxidative species.

Fig. 3 Criegee mechanism, R and R' are arbitrary functional groups.

Fig. 4 Structures of the Criegee intermediate, ' R ' is an arbitrary functional group.

Fig. 5 Proposed unimolecular (VHP and Ester) mechanistic pathways of the CI, ' R_1 ' is a cyclic group.

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Fig. 6 Proposed pathways for the bimolecular reactions of the CI, ' R_1 ' denotes a cyclic group.

Fig. 7 Upward and downward additions and POZ.

Fig. 8 Bimolecular reactions of SCI with SO_2 via the formation of a cyclic adduct.

Fig. 9 Pathways for the SCI + H_2O reactions. These SCI result from the endo and exo double bonds ozonolysis of limonene, a, b and c are *anti*-CI, *syn*-CI and another *syn*-CI, respectively.⁴⁹

Fig. 10 Cyclic and acyclic addition of NO to CI.