HCCO IN INTERSTELLAR SPACE

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Structure

The ketenyl radical(HCCO) has a planar structure with a practically linear CCO backbone and the H atom lying out of the linear axis. The radical has a $^2A''$ ground electronic state and a complex rotational structure whose N_{K_a,K_c} levels split in a fine (electronic spin-rotation interaction) and hyperfine (H nuclear spin) structure described by the quantum numbers

Interstellar Sources of Detection