MICROWAVE SPECTRA OF ISOTOPIC SPECIES OF METHANOL

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Microwave spectrum of $CH_3\ ^{18}OH$ has been observed in frequency range between 8 and 200 GHz. Observed lines are those with $J \leq 39$, —K—$\leq$8 for both the $A$ and $E$ species in the torsional ground state and some lines, mainly $a$-type transitions, in the torsional excited states for $v_t$=1-3. Total 568 lines have been fitted to 64 parameters in a reduced Hamiltonian with a root-mean square (RMS) of 0.262 MHz, where the $A$ and $E$ substates are treated simultaneously. Microwave spectrum of $CH_3OD$ has been observed in the frequency range between 7 and 200 GHz. These lines have been analyzed by using a reduced Hamiltonian.