

THE MICROWAVE SPECTRUM OF 1,2,4-TRIAZINE AND THE ROTATIONAL CONSTANTS OBTAINED FROM A SIMULTANEOUS ANALYSIS OF MICROWAVE GROUND STATE AND HIGH RESOLUTION IR-TRANSITIONS.

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The microwave spectrum of 1,2,4-triazine has been recorded in the Ku- and Ka-bands using a conventional stark spectrometer. The low-J lines appeared close to the frequencies predicted for the ground state from the high resolution FTIR-studies<sup>a</sup>, but to secure a correct assignment of higher J Q-branch transitions, a microwave-microwave double resonance experiment was done for a few pairs of transitions sharing a common level. 145 transitions were recorded with  $J_{max}=42$ ,  $K_{a,max}=33$ , and  $K_{c,max}=11$ . A simultaneous fit to MW pure rotational transitions and to the rotational structure of selected IR-bands led to a determination of rotational and all 5 quartic centrifugal distortion constants.

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<sup>a</sup>Palmer, Maier, Hegelund, and Newnham, *J. Mol. Spectrosc.* 192, 331, (1998) and Bach, Hegelund, Beukes, Nicolaisen, and Palmer, *J. Mol. Spectrosc.* 198, (1999)