

## Structure and vibrational spectra of 1:1 chloranilic acid (CLA) - tetramethylpyrazine (TMP) complex.

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In searching for new molecular materials the crystals of 1:1 complexes of tetramethylpyrazine (TMP) with chloranilic acid (CLA) were grown. In the crystalline lattice of TMP.CLA infinite chains of hydrogen bonded components are formed. Very strong ( $d(O\cdots N) = 2.692(2) \text{ \AA}$ ) hydrogen bonds without proton transfer are present. The components of the complex form stacks of parallel arrangement with the distance typical of van der Waals interaction. One can conclude that in packing, interactions via hydrogen bonds play a decisive role. In the IR spectrum one observes a broad, continuous absorption with well resolved trio typical of strong hydrogen bonds. A detailed analysis of IR and Raman spectra in the low frequency region related to deformation vibrations of CH<sub>3</sub> groups shows that strong interaction via hydrogen bonding only slightly affects the dynamics of these groups.

### Adres publiczny

<https://doi.org/10.1007/s11224-005-4459-4>

### Strona internetowa wydawcy

<http://link.springer.com>