

Wechselwirkungen in Moleklkristallen, 149 [1 - 3].

**Wirt/Gast-Einschlubverbindungen von N,N'-Ditosyl-*p*-phenylendiamin:
Die Wasserstoffbrcken-Addukte mit Morpholin; Pyridin,
N,N-Dimethylformamid und Dimethylsulfoxid**

Interactions in Molecular Crystals, 149 [1 - 3]. Host/Guest-Inclusion Compounds of N,N'-Ditosyl-*p*-phenylenediamine: The Hydrogen Bonded Adducts with Morpholine, Pyridine, N,N-Dimethylformamide, and Dimethylsulfoxide

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Basic principles of hydrogen-bonding are reviewed including cooperative effects and within the novel class of inclusion compounds formed by N,N'-ditosyl-*p*-phenylenediamine as a capable host, four aggregates with the hydrogen donor or acceptor guest molecules morpholine, pyridine, N,N-dimethylformamide and dimethylsulfoxide are reported. Morpholine introduces three additional hydrogen bonds N-H...N, N-H...O as well as C-H...O, and pyridine, DMF and DMSO each one of type N-H...N, N-H...O(=C) and N-H...O(=S). Crystallization and structures determined are discussed in detail with special emphasis on the varying sulfonamide conformation as well as on cavity or channel inclusion of the guest molecules. In conclusion, the crystal growth conditions and the structures of the altogether 13 N,N'-ditosyl-*p*-phenylenediamine inclusion compounds investigated are reviewed and possible reasons for their formation are discussed.

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