

Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

 [Keywords](#)
[Authors](#)



chem@tubitak.gov.tr

[Scientific Journals Home Page](#)

Crystal Structure of cis-bis(N,N-dimethyl-N'-benzoylthioureato)palladium(II)

Göktürk AVŞAR, Hakan ARSLAN
Department of Chemistry, Faculty of Arts and Sciences,
Mersin University, Mersin-TURKEY
e-mail: arslanh@mersin.edu.tr

Hans-Jurgen HAUPT
Department of Inorganic and Analytical Chemistry,
University of Paderborn, Paderborn-GERMANY
Nevzat KÜLCÜ
Department of Chemistry, Faculty of Arts and Sciences,
Mersin University, Mersin-TURKEY

Abstract: In this study cis-bis(N,N-dimethyl-N'-benzoylthioureato) palladium(II) is synthesised and the crystal structure is determined by X-ray diffraction methods. It crystallises in the space group $P2_1/c$, with $a = 11.943(1) \text{ \AA}$, $b = 11.713(1) \text{ \AA}$, $c = 15.345(1) \text{ \AA}$, $\beta = 93.90(1)^\circ$, and $D_{\text{calc}} = 1.616 \text{ g cm}^{-3}$ for $Z = 4$. The Pd(II) atom is in a four-coordinate geometry consisting of two thiocarbonyl S and two carbonyl O atoms from two ligand groups. The Pd-S and Pd-O bond lengths are 2.2313(6) and 2.0211(16) \AA , respectively.

Key Words: Complex, X-ray structure, single crystal, N,N-dimethyl-N'- benzoylthiourea

Turk. J. Chem., **27**, (2003), 281-286.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.27, iss.3.](#)