Dioxomolybdän(VI)-Komplexe mit dreizähnigen diaciden Liganden

Dioxomolybdenum(VI) Complexes with Tridentate Diacidic Ligands

Wolfgang Banße, Jana Fliegner, Stefan Sawusch, Uwe Schilde*, Erhard Uhlemann

Institut für Anorganische Chemie und Didaktik der Chemie, Universität Potsdam,
Postfach 601563, D-14415 Potsdam

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Ligand Exchange Reactions, Dioxomolybdenum(VI) Complexes, Tridentate Diacidic Ligands, Crystal Structure

Dioxomolybdenum(VI) complexes have been synthesized by ligand exchange reactions of $Mo(CO)_6$, $Mo(NO)_2(acac)_2$ and $MoO_2(acac)_2$ with tridentate diacidic ligands. X-ray structure analyses were performed on single crystals. The complexes salicylaldehyde-2-hydroxyanilato(2-)-triphenylphosphaneoxide-dioxomolybdenum(VI) (**1b**) and 2,2'-dihydroxy-azobenzenato(2-)-triphenylphosphaneoxide-dioxomolybdenum(VI) (**2**) are isomorphous. In all chelates the Mo atom is in a distorted octahedral environment.

Structural data: Salicylaldehyde-2-hydroxyanilato(2-)-tetrahydrofurane-dioxomolybdenum (VI) (**1a**): a = 23.381(6) Å, b = 6.756(2) Å, c = 28.380(8) Å, β = 124.47(2)°; Salicylaldehyde-2-hydroxyanilato(2-)-triphenylphosphaneoxide-dioxomolybdenum (VI) (**1b**): a = 9.4208(14) Å, b = 30.550(5) Å, c = 10.461(2) Å, β = 111.005(17)°; 2,2'-Dihydroxy-azobenzenato(2-)-triphenylphosphaneoxide-dioxomolybdenum(VI) (**2**): a = 9.392(2) Å, b = 31.012(13) Å, c = 10.350(2) Å, β =110.968(17)°; Salicylaldehyde-salicylhydrazonato(2-)-triphenylphosphaneoxide-dioxomolybdenum(VI) (**3**): a = 9.321(2) Å, b = 12.048(2) Å, c = 13.858(3) Å, α = 101.90(2)°, β = 94.94(2)°, γ = 105.479(17)°.

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