Kristallstruktur von $[\text{Mo(CO)}_3(\text{NCMe})(S'\text{Bu})]_2$

Crystal Structure of $[\text{Mo(CO)}_3(\text{NCMe})(S'\text{Bu})]_2$

Mike R. Kopp, Bernhard Neumüller*

Fachbereich Chemie der Universität Marburg, Hans-Meerwein-Straße, D-35032 Marburg, Germany


Molybdenum Carbonyl Complex, Thioloato Complex, Crystal Structure

Single crystals of $[\text{Mo(CO)}_3(\text{NCMe})(S'\text{Bu})]_2$ (1) and $[[\text{Mo(CO)}_3]_2\text{Mo(CO)}_2][S'\text{Bu}]_4$ (2) were obtained by the reaction of $[\text{Mo(CO)}_3(\text{NCMe})_3]$ with $[(\text{PhCH}_2)_2\text{GaS'Bu}]_2$ in 1,4-dioxane. The X-ray structure determination of 1 showed the presence of a Mo$_2$S$_2$ four-membered ring with a Mo-Mo bond length of 296,7(1) pm. Space group Pbca, $Z = 4$, lattice dimensions at -80 °C: $a = 1588,2(3)$, $b = 905,8(1)$, $c = 1676,0(1)$ pm, $R_1 = 0,0555$.