Abstract

The reaction of tetrahalooctacarbonyldimolybenum (II) complexes with various alylamines has studied with the aim of finding out the nature of the organic oxidation products. In these reactions, piperidine, I-ethylpiperidine, I-methylpiperdine, 2-ethylpiperidine and benzylamine were used in the study. The results obtained show that as in the previous studies, molybdenum (II) is reduced to molybdenum (0). There is no evidence of molybdenum (III) species; hence the reaction must be proceeding via a redox mechanism. Our studies suggest that the amines are oxidized to imines and in a few cases; it was possible to isolate the imine salts.