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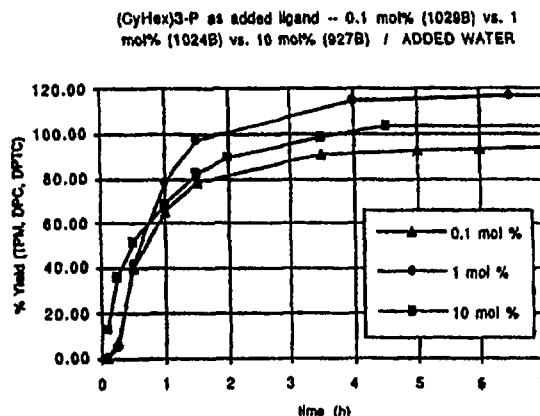
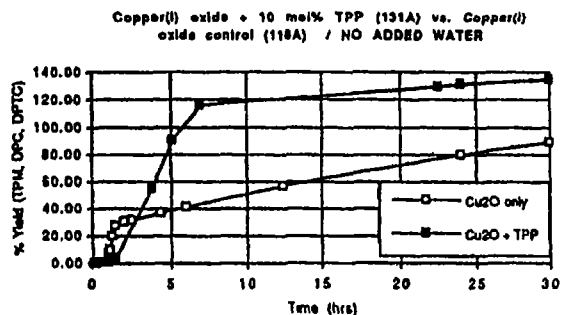


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(54) Title: PHOSPHINE LIGAND PROMOTED SYNTHESIS OF TETRAARYLOXYALKANE AND DIARYLCARBONATES

(57) Abstract

Addition of phosphine ligands can produce high yields of tetraphenoxymethane, TPM, and diphenylcarbonate, DPC, in short reaction times and improved reaction rates by a copper-induced condensation of phenol and carbon disulfide, CS₂. Either aromatic or aliphatic substituted phosphine ligands can be employed. The copper (I) oxide utilization is significantly improved in reactions containing phosphine ligands, such that yields exceeding 100 % tetraphenoxymethane are observed. Some of the sulfur-containing byproduct is transferred to the phosphine in the form of phosphine sulfide.



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