

Thermolysis of Some Spirobenzopyran-3',2-[1,3,4]oxadithiino-[5,6-*c*]benzopyran-4'-ones in the Presence of Some Homodienes and Crystallographic Studies of Some Adducts

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The very reactive α -oxo-thioketone derivatives **2a – d**, generated *via* thermolysis of spirobenzopyran-3',2-[1,3,4]oxadithiino[5,6-*c*]benzopyran-4'-ones **1a – d**, reacted with 2,3-dimethyl-1,3-butadiene and 1,3-cyclohexadiene under [4+2]-cycloaddition to afford spirobenzopyran-3',6-thiapyran-4'-one adducts **3a – d** and spirobenzopyran-3',3-thiabicyclo[2.2.2]oct-5-en-4'-one adducts **4a – d**, respectively. On the other hand, the reaction of α -oxo-thioketones **2a – d** with isoprene afforded regioselectively only 3-methyl-thiapyran derivatives **5a – d**. Single crystal X-ray diffraction studies of **4b**, **4c**, and **5a** give a good support for the established structure.

Key words: α -Oxo-thioketones, Spirobenzopyran-3',6-thiapyran-4'-one, Hetero-Diels-Alder Reaction