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MASS SPECTROMETRY OF THE ISOMERIC OCTAHYDROBENZOPYRIMIDINE-2'THIONE-4',1-SPIROCYCLOHEXANE AND 2'-AMINOOCTAHYDROBENZO-3',1'THIAZINE-4',1-SPIROCYCLOHEXANE

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Some authors have shown that tetrahydropyrimidine-2-thiones are hydrated in acidic solution and then isomerise to the 2-imino-or 2-enamino-1,3-thiazine.

On the other hand 2'-aminooctahydrobenzo-3',l'-thiazine-4',l-spirocyclohexane, /I/, undergo a reverse isomerisation in the presence of toluenesulfonic acid, that is to octahydrobenzo-pyrimidine-2'-thione-4',l-spirocyclohexane, /II/.

An analysis of the mass spectra of the both compounds /I/ and /II/ suggests that, apart from a direct fragmentation of the molecular ions, the isomerisation of the molecular ions precedes the fragmentation too.