

Dimolybdenum tetrakis (triphenylacetate)

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Field strength: 500 MHz

Why is this your favorite spectrum?

This metal complex contains 12 equivalent monosubstituted phenyl rings, but the aromatic region of the ¹H NMR spectrum shows only a pentet and a doublet. This is an example of virtual coupling – the proton para to the ring substituent sees all four other protons as equivalent and is thus split into a pentet. The other four protons appear only to be split by the para proton and are represented by the doublet.