



### The Classical Case of the Diethyl Acetal of Acetaldehyde

Are  $H_a$  and  $H_b$  equivalent or not? No, they are diastereotopic. There is no symmetry element that exchanges these two H-atoms. This is the condition that matters. Build a model for the structures that result from D exchange of  $H_a$  and  $H_b$ .

### -Thujene (4-10)

Are the methyl groups of the isopropyl group homotopic, enantiotopic or diastereotopic? Is there a chiral center in this molecule?