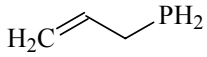
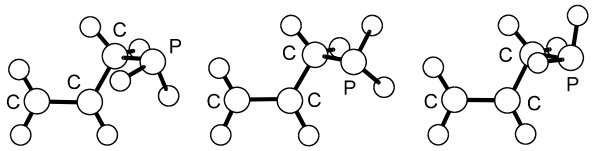
437 **C_3H_7P** **2-Propenylphosphine** **C_1** (conformers I, II, III)
MW Allylphosphine



Three conformers were assigned, and all of them have an *anticlinal* (*skew*) conformation of the C=C–C–P chain of atoms. The orientation of the phosphino group is different in the three conformers I, II, and III; a distinction between the three forms can be made with reference to the lone pair (lp) of the phosphino group. In conformer I, the lp–P–C–C link is *antiperiplanar*, whereas the lp–P–C–C chain is *–synclinal* (*+gauche*) in conformer II and *+synclinal* (*–gauche*) in conformer III. Conformer I is 1.4(3) kJ mol^{-1} more stable than conformer II and 1.6(3) kJ mol^{-1} more stable than conformer III.



Møllendal, H., Demaison, J., Guillemin, J.-C.: J. Phys. Chem. A **106** (2002) 11481.