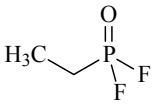
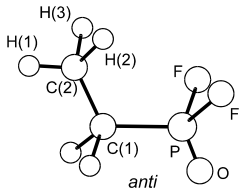
284 **$C_2H_5F_2OP$** **Ethylphosphonic difluoride** **C_s** (*anti*)
MW **C_1** (*gauche*)



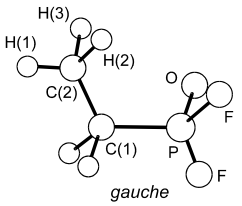
r_0 [a])	Å	Å	θ_0 [a])	deg	deg
	anti	*gauche*		*anti*	*gauche*
P–C	1.8016(124)	1.7954(129)	C–C–P	113.64(103)	111.85(123)
P–F	1.5486(132)	1.5462(82)	C–P–F	104.42(39)	103.55(82)
P=O	1.440 [b])	1.440 [b])	C–P=O	118.6 [b])	118.6 [b])
C(1)–C(2)	1.522 [b])	1.522 [b])	F–P–F [c])	98.75	99.26
C(1)–H	1.093 [b])	1.093 [b])	C(2)–C(1)–H	111.3 [b])	111.3 [b])
C(2)–H	1.091 [b])	1.091 [b])	H–C(1)–H [c])	107.58	107.58
			P–C(1)–H [c])	106.33	107.29
			C–C–H(1)	110.0 [b])	110.0 [b])
			C–C–H(2,3)	111.0 [b])	111.0 [b])
			H(2)–C–H(3) [c])	107.90	107.90
			H(1)–C–H(2,3) [c])	108.43	108.43
			C–C–P…H [d])	±120.0 [b])	±120.0 [b])
			F–P–C…O [d])	±128.4 [b])	±128.4 [b])
			C–C–P=O [d])	180.0 [b])	302.0 [b])
			P–C–C–H(1) [d])	180.0 [b])	178.4 [b])
			H(1)–C–C–H(2,3)	±120.0 [b])	±120.0 [b])

The enthalpy difference between the two conformers is estimated to be less than 10 cm^{-1}.

[a]) Determined by a diagnostic least-squares adjustment procedure.
[b]) Assumed.
[c]) Dependent parameter.
[d]) Dihedral angle.



anti



gauche

Durig, J.R., Gounev, T.K., Braathens, O.A.: J. Mol. Struct. **355** (1995) 159.