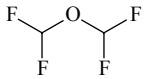
219 **$C_2H_2F_4O$** **Bis(difluoromethyl) ether** **C_1** (*syn-anti*)
MW Oxybis(difluoromethane)



θ_0	deg [a])
H(1)–C(1)–O–C(2) [b])	177(5)
H(2)–C(2)–O–C(1) [b])	12(5)

One conformer, *syn-anti* (see figure), was detected. The ground state spectrum is accompanied by a series of strong lines from the vibrationally excited states; five states of the ν_{21} torsional mode were assigned and analyzed in terms of a double-minimum potential with a barrier of 19 cm^{-1} in the *syn* position.

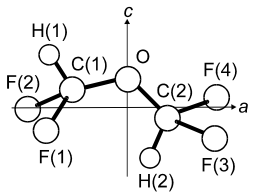
[a]) Uncertainties were not estimated in the original paper.
[b]) Dihedral angle measured from *syn*.

Horn, A., Marstokk, K.-M., Møllendal, H., Nielsen, C.J., Powell, D.L.: J. Mol. Struct. **509** (1999) 221.

r_0	Å [a])
C(1)–O	1.3745 [b])
C(2)–O	1.358(3)

θ_0	deg [a])
C(1)–O–C(2)	116.77(13)
C(1)–O–C(2)–H(2)	24.4(4)

Atom	a_s [Å]	b_s [Å]	c_s [Å]
C(1)	–1.286	[c])	0.446
C(2)	0.937	0.031	–0.230
O	[c])	0.049	0.808
H(1)	–1.905	0.081	1.351
H(2)	0.273	0.291	–1.222



The structural parameters are applicable to only the ground (*i.e.*, symmetric torsional) state.

[a]) Twice the estimated standard errors.
[b]) Assumed at the *ab initio* value.
[c]) Imaginary value.

Suenram, R.D., Lovas, F.J., Walker, A.R.H., Dixon, D.A.: J. Mol. Spectrosc. **192** (1998) 441.