

2,2,3,3-Tetrafluoropropyl-1',1',2',3',3'-hexafluoropropyl ether

InChI: InChI=1S/C6H4F10O/c7-3(8)4(9,10)1-17-2(5(11,12)13)6(14,15)16/h2-3H,1H2
InChIKey: CXEFFVMAMIDRRR-UHFFFAOYSA-N
Formula: C6H4F10O
SMILES: FC(F)C(F)(F)COC(C(F)(F)F)C(F)(F)F
Mol. weight [g/mol]: 282.08
CAS: 65064-78-0

Physical Properties

Property code	Value	Unit	Source
gf	-2049.82	kJ/mol	Joback Method
hf	-2297.30	kJ/mol	Joback Method
hfus	14.00	kJ/mol	Joback Method
hvap	18.53	kJ/mol	Joback Method
log10ws	-3.49		Crippen Method
logp	3.397		Crippen Method
mcvol	118.970	ml/mol	McGowan Method
pc	2088.84	kPa	Joback Method
tb	341.23	K	Joback Method
tc	463.14	K	Joback Method
tf	162.77	K	Joback Method
vc	0.524	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	263.17	J/molxK	341.23	Joback Method
cpg	273.40	J/molxK	361.55	Joback Method
cpg	283.16	J/molxK	381.87	Joback Method
cpg	292.44	J/molxK	402.19	Joback Method
cpg	301.28	J/molxK	422.50	Joback Method
cpg	309.69	J/molxK	442.82	Joback Method
cpg	317.67	J/molxK	463.14	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C65064780&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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