Glutaric acid, di(2-fluoroethyl) ester

Inchi: InChI=1S/C9H14F2O4/c10-4-6-14-8(12)2-1-3-9(13)15-7-5-11/h1-7H2
InchiKey: VQBACQRZUFWLSX-UHFFFAOYSA-N
Formula: C9H14F2O4
SMILES: O=C(CCCC(=O)OCCF)OCCF
Mol. weight [g/mol]: 224.20

Physical Properties

Property code	Value	Unit	Source
gf	-832.56	kJ/mol	Joback Method
hf	-1110.91	kJ/mol	Joback Method
hfus	30.80	kJ/mol	Joback Method
hvap	52.31	kJ/mol	Joback Method
log10ws	-1.02		Crippen Method
logp	1.182		Crippen Method
mcvol	156.090	ml/mol	McGowan Method
pc	2311.39	kPa	Joback Method
rinpol	1409.00		NIST Webbook
rinpol	1409.00		NIST Webbook
tb	556.44	K	Joback Method
tc	723.49	K	Joback Method
tf	336.69	K	Joback Method
vc	0.624	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	384.51	J/mol×K	556.44	Joback Method
cpg	395.84	J/mol×K	584.28	Joback Method
cpg	406.75	J/mol×K	612.12	Joback Method
cpg	417.22	J/mol×K	639.96	Joback Method
cpg	427.27	J/mol×K	667.81	Joback Method
cpg	436.88	J/mol×K	695.65	Joback Method
cpg	446.05	J/mol×K	723.49	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U393723&Units=SI

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume