Butyramide, 2,2,3,3,4,4,4-heptafluoro-

Inchi: InChI=1S/C4H2F7NO/c5-2(6,1(12)13)3(7,8)4(9,10)11/h(H2,12,13)
InchiKey: FOBJABJCODOMEO-UHFFFAOYSA-N
Formula: C4H2F7NO
SMILES: N=C(O)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 213.05

Physical Properties

Property code	Value	Unit	Source
gf	-1305.57	kJ/mol	Joback Method
hf	-1478.81	kJ/mol	Joback Method
hvap	43.65	kJ/mol	Joback Method
log10ws	-3.52		Crippen Method
logp	2.355		Crippen Method
mcvol	91.160	ml/mol	McGowan Method
tb	452.64	K	Joback Method
tf	275.83	K	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	230.62	J/mol×K	452.64	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method
cpg	41.59	J/mol×K	100.12	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=B6005860&Units=SI

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

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation 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
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point