2-Amino-2-methylpropan-1-ol, N-pentafluoropropionyl

Other names: 2,2,3,3,3-Pentafluoro-N-(1-hydroxy-2-methylpropan-2-yl)propanamide
Inchi: InChI=1S/C7H10F5NO2/c1-5(2,3-14)13-4(15)6(8,9)7(10,11)12/h14H,3H2,1-2H3,(H,13,15
InchiKey: SRZZIOLRYMDSIP-UHFFFAOYSA-N
Formula: C7H10F5NO2
SMILES: CC(C)(CO)NC(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 235.15

Physical Properties

Property code	Value	Unit	Source
gf	-1133.82	kJ/mol	Joback Method
hf	-1405.95	kJ/mol	Joback Method
hfus	17.83	kJ/mol	Joback Method
hvap	53.06	kJ/mol	Joback Method
log10ws	-2.07		Crippen Method
logp	1.071		Crippen Method
mcvol	135.760	ml/mol	McGowan Method
pc	2799.47	kPa	Joback Method
rinpol	991.00		NIST Webbook
rinpol	991.00		NIST Webbook
tb	542.44	K	Joback Method
tc	705.20	K	Joback Method
tf	342.27	K	Joback Method
vc	0.544	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.75	J/mol×K	542.44	Joback Method
cpg	372.58	J/mol×K	569.57	Joback Method
cpg	381.75	J/mol×K	596.69	Joback Method
cpg	390.28	J/mol×K	623.82	Joback Method
cpg	398.21	J/mol×K	650.95	Joback Method
cpg	405.60	J/mol×K	678.08	Joback Method
cpg	412.47	J/mol×K	705.20	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378713&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

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