2-Methylamino-2-methylpropan-1-ol, N-pentafluoropropionyl, methyl ether

Other names: 2,2,3,3,3-Pentafluoro-N-(1-methoxy-2-methylpropan-2-yl)-N-methylpropanamide
Inchi: InChI=1S/C9H14F5NO2/c1-7(2,5-17-4)15(3)6(16)8(10,11)9(12,13)14/h5H2,1-4H3
InchiKey: YQMTYWOWOLERNW-UHFFFAOYSA-N
Formula: C9H14F5NO2
SMILES: COCC(C)(C)N(C)C(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 263.20

Physical Properties

Property code	Value	Unit	Source
gf	-1063.77	kJ/mol	Joback Method
hf	-1413.16	kJ/mol	Joback Method
hfus	18.03	kJ/mol	Joback Method
hvap	38.85	kJ/mol	Joback Method
log10ws	-2.11		Crippen Method
logp	2.067		Crippen Method
mcvol	163.940	ml/mol	McGowan Method
pc	2054.89	kPa	Joback Method
rinpol	1066.00		NIST Webbook
rinpol	1066.00		NIST Webbook
tb	480.71	K	Joback Method
tc	641.58	K	Joback Method
tf	306.03	K	Joback Method
vc	0.638	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	405.34	J/mol×K	480.71	Joback Method
cpg	419.38	J/mol×K	507.52	Joback Method
cpg	432.60	J/mol×K	534.33	Joback Method
cpg	445.03	J/mol×K	561.15	Joback Method
cpg	456.73	J/mol×K	587.96	Joback Method
cpg	467.71	J/mol×K	614.77	Joback Method
cpg	478.02	J/mol×K	641.58	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=U378723&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

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