Pentafluoropropanamide, N,N-diundecyl-

Inchi: InChI=1S/C25H46F5NO/c1-3-5-7-9-11-13-15-17-19-21-31(23(32)24(26,27)25(28,29)30)2
InchiKey: VDIYAMMQNLTLQI-UHFFFAOYSA-N
Formula: C25H46F5NO
SMILES: CCCCCCCCCCCN(CCCCCCCCCCC)C(=O)C(F)(F)C(F)(F)F
Mol. weight [g/mol]: 471.63

Physical Properties

Property code	Value	Unit	Source
gf	-826.89	kJ/mol	Joback Method
hf	-1602.43	kJ/mol	Joback Method
hfus	65.70	kJ/mol	Joback Method
hvap	73.36	kJ/mol	Joback Method
log10ws	-9.61		Crippen Method
logp	9.074		Crippen Method
mcvol	383.510	ml/mol	McGowan Method
pc	713.39	kPa	Joback Method
rinpol	2470.00		NIST Webbook
tb	827.60	K	Joback Method
tc	1016.02	K	Joback Method
tf	461.70	K	Joback Method
vc	1.528	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1268.22	J/mol×K	827.60	Joback Method
cpg	1290.00	J/mol×K	859.00	Joback Method
cpg	1310.59	J/mol×K	890.41	Joback Method
cpg	1330.08	J/mol×K	921.81	Joback Method
cpg	1348.57	J/mol×K	953.21	Joback Method
cpg	1366.14	J/mol×K	984.62	Joback Method
cpg	1382.88	J/mol×K	1016.02	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=U308518&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