1-Aminoeicosane, N-trifluoroacetyl-

Other names: 1-Aminoeicosane, TFA
Inchi: InChI=1S/C22H42F3NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-26-21(27
InchiKey: MOXAXUSNVSZOAE-UHFFFAOYSA-N
Formula: C22H42F3NO
SMILES: CCCCCCCCCCCCCCCCCCCCCNC(=O)C(F)(F)F
Mol. weight [g/mol]: 393.57

Physical Properties

Property code	Value	Unit	Source
gf	-486.76	kJ/mol	Joback Method
hf	-1153.60	kJ/mol	Joback Method
hfus	61.26	kJ/mol	Joback Method
hvap	74.00	kJ/mol	Joback Method
log10ws	-8.66		Crippen Method
logp	7.707		Crippen Method
mcvol	337.700	ml/mol	McGowan Method
pc	880.52	kPa	Joback Method
rinpol	2424.00		NIST Webbook
rinpol	2424.00		NIST Webbook
tb	801.38	K	Joback Method
tc	981.12	K	Joback Method
tf	444.48	K	Joback Method
vc	1.351	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1089.52	J/mol×K	801.38	Joback Method
cpg	1109.29	J/mol×K	831.34	Joback Method
cpg	1128.02	J/mol×K	861.29	Joback Method
cpg	1145.78	J/mol×K	891.25	Joback Method
cpg	1162.62	J/mol×K	921.21	Joback Method
cpg	1178.59	J/mol×K	951.16	Joback Method
cpg	1193.75	J/mol×K	981.12	Joback Method

Sources

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=U360371&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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