Benzamide, n-decyl-N-methyl-2,3,4-trifluoro-

Inchi: InChI=1S/C18H26F3NO/c1-3-4-5-6-7-8-9-10-13-22(2)18(23)14-11-12-15(19)17(21)16(14
InchiKey: BBASOXGNNHQMTB-UHFFFAOYSA-N
Formula: C18H26F3NO
SMILES: CCCCCCCCCCN(C)C(=O)c1ccc(F)c(F)c1F
Mol. weight [g/mol]: 329.40

Physical Properties

Property code	Value	Unit	Source
gf	-418.37	kJ/mol	Joback Method
hf	-846.11	kJ/mol	Joback Method
hfus	49.11	kJ/mol	Joback Method
hvap	66.26	kJ/mol	Joback Method
log10ws	-6.38		Crippen Method
logp	5.317		Crippen Method
mcvol	257.580	ml/mol	McGowan Method
pc	1337.84	kPa	Joback Method
rinpol	2115.00		NIST Webbook
rinpol	2115.00		NIST Webbook
tb	716.98	K	Joback Method
tc	894.19	K	Joback Method
tf	440.77	K	Joback Method
vc	1.014	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	744.82	J/mol×K	716.98	Joback Method
cpg	761.02	J/mol×K	746.51	Joback Method
cpg	776.37	J/mol×K	776.05	Joback Method
cpg	790.92	J/mol×K	805.58	Joback Method
cpg	804.68	J/mol×K	835.12	Joback Method
cpg	817.69	J/mol×K	864.65	Joback Method
cpg	829.98	J/mol×K	894.19	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U308421&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