

Benzamide, 4-(trifluoromethyl)-N-ethyl-

Inchi:	InChI=1S/C10H10F3NO/c1-2-14-9(15)7-3-5-8(6-4-7)10(11,12)13/h3-6H,2H2,1H3,(H,14,15)
InchiKey:	NLNQKSZGPHXWFN-UHFFFAOYSA-N
Formula:	C10H10F3NO
SMILES:	CCNC(=O)c1ccc(C(F)(F)F)cc1
Mol. weight [g/mol]:	217.19

Physical Properties

Property code	Value	Unit	Source
gf	-485.02	kJ/mol	Joback Method
hf	-680.86	kJ/mol	Joback Method
hfus	23.83	kJ/mol	Joback Method
hvap	50.23	kJ/mol	Joback Method
log10ws	-3.34		Crippen Method
logp	2.455		Crippen Method
mvol	144.860	ml/mol	McGowan Method
pc	2764.26	kPa	Joback Method
rinpol	1450.00		NIST Webbook
rinpol	1450.00		NIST Webbook
tb	558.48	K	Joback Method
tc	756.68	K	Joback Method
tf	348.18	K	Joback Method
vc	0.572	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.74	J/mol×K	558.48	Joback Method
cpg	364.17	J/mol×K	591.51	Joback Method
cpg	375.77	J/mol×K	624.55	Joback Method
cpg	386.57	J/mol×K	657.58	Joback Method
cpg	396.62	J/mol×K	690.61	Joback Method
cpg	405.96	J/mol×K	723.64	Joback Method
cpg	414.64	J/mol×K	756.68	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407294&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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
h vap:	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
r in pol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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