N-Benzylacrylamide

Other names: 2-Propenamide, N-(phenylmethyl)-
Inchi: InChI=1S/C10H11NO/c1-2-10(12)11-8-9-6-4-3-5-7-9/h2-7H,1,8H2,(H,11,12)
InchiKey: OHLHOLGYGRKZMU-UHFFFAOYSA-N
Formula: C10H11NO
SMILES: C=CC(=O)NCc1ccccc1
Mol. weight [g/mol]: 161.20
CAS: 13304-62-6

Physical Properties

Property code	Value	Unit	Source
gf	194.04	kJ/mol	Joback Method
hf	53.12	kJ/mol	Joback Method
hfus	21.11	kJ/mol	Joback Method
hvap	52.64	kJ/mol	Joback Method
log10ws	-2.42		Crippen Method
logp	1.489		Crippen Method
mcvol	135.250	ml/mol	McGowan Method
pc	3345.11	kPa	Joback Method
tb	555.60	K	Joback Method
tc	775.36	K	Joback Method
tf	329.71	K	Joback Method
vc	0.509	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	304.40	J/mol×K	555.60	Joback Method
cpg	317.58	J/mol×K	592.23	Joback Method
cpg	329.87	J/mol×K	628.85	Joback Method
cpg	341.31	J/mol×K	665.48	Joback Method
cpg	351.94	J/mol×K	702.11	Joback Method
cpg	361.82	J/mol×K	738.73	Joback Method
cpg	370.97	J/mol×K	775.36	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C13304626&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume