Phenylaminoethyl methacrylate

Inchi: InChI=1S/C12H15NO2/c1-10(2)12(14)15-9-8-13-11-6-4-3-5-7-11/h3-7,13H,1,8-9H2,2H3
InchiKey: UGCSBAYAYZNGRD-UHFFFAOYSA-N
Formula: C12H15NO2
SMILES: C=C(C)C(=O)OCCNc1ccccc1
Mol. weight [g/mol]: 205.25
CAS: 19288-59-6

Physical Properties

Property code	Value	Unit	Source
gf	97.33	kJ/mol	Joback Method
hf	-130.17	kJ/mol	Joback Method
hfus	26.17	kJ/mol	Joback Method
hvap	59.58	kJ/mol	Joback Method
log10ws	-2.29		Crippen Method
logp	2.218		Crippen Method
mcvol	169.300	ml/mol	McGowan Method
pc	2676.31	kPa	Joback Method
tb	623.66	K	Joback Method
tc	837.15	K	Joback Method
tf	360.52	K	Joback Method
vc	0.640	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	424.08	J/mol×K	623.66	Joback Method
cpg	438.54	J/mol×K	659.24	Joback Method
cpg	452.09	J/mol×K	694.82	Joback Method
cpg	464.75	J/mol×K	730.40	Joback Method
cpg	476.57	J/mol×K	765.98	Joback Method
cpg	487.57	J/mol×K	801.57	Joback Method
cpg	497.79	J/mol×K	837.15	Joback Method
hfust	25.46	kJ/mol	297.50	NIST Webbook
hfust	25.47	kJ/mol	297.50	NIST Webbook

sfust	85.60	J/mol×K	297.50	NIST Webbook

Sources

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=C19288596&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
hfust:	Enthalpy of fusion at a given temperature
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
sfust:	Entropy of fusion at a given temperature
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume