p-N,N-Dimethylamino-styrene

Other names: p-(Dimethylamino)styrene
Inchi: InChI=1S/C10H13N/c1-4-9-5-7-10(8-6-9)11(2)3/h4-8H,1H2,2-3H3
InchiKey: GQWAOUOHRMHSHL-UHFFFAOYSA-N
Formula: C10H13N
SMILES: C=Cc1ccc(N(C)C)cc1
Mol. weight [g/mol]: 147.22
CAS: 2039-80-7

Physical Properties

Property code	Value	Unit	Source
gf	334.72	kJ/mol	Joback Method
hf	168.29	kJ/mol	Joback Method
hfus	17.05	kJ/mol	Joback Method
hvap	42.17	kJ/mol	Joback Method
log10ws	-2.20		Crippen Method
logp	2.396		Crippen Method
mcvol	133.680	ml/mol	McGowan Method
pc	3012.33	kPa	Joback Method
tb	468.98	K	Joback Method
tc	676.70	K	Joback Method
tf	290.00	K	NIST Webbook
vc	0.486	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	272.16	J/mol×K	468.98	Joback Method
cpg	287.13	J/mol×K	503.60	Joback Method
cpg	301.20	J/mol×K	538.22	Joback Method
cpg	314.42	J/mol×K	572.84	Joback Method
cpg	326.82	J/mol×K	607.46	Joback Method
cpg	338.45	J/mol×K	642.08	Joback Method
cpg	349.35	J/mol×K	676.70	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	338.00	K	0.04	NIST Webbook

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2039807&Units=SI

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume