1,2-Difluorostilbene

Other names: [1,2-Difluoro-2-phenylethenyl]benzene
Inchi: InChI=1S/C14H10F2/c15-13(11-7-3-1-4-8-11)14(16)12-9-5-2-6-10-12/h1-10H/b14-13+
InchiKey: VIWUJKBBJRFTMC-BUHFOSPRSA-N
Formula: C14H10F2
SMILES: FC(=C(F)c1ccccc1)c1ccccc1
Mol. weight [g/mol]: 216.23
CAS: 643-76-5

Physical Properties

Property code	Value	Unit	Source
gf	-34.68	kJ/mol	Joback Method
hf	-153.81	kJ/mol	Joback Method
hfus	23.84	kJ/mol	Joback Method
hvap	49.79	kJ/mol	Joback Method
log10ws	-4.77		Crippen Method
logp	4.451		Crippen Method
mcvol	159.840	ml/mol	McGowan Method
pc	2690.21	kPa	Joback Method
tb	575.54	K	Joback Method
tc	810.24	K	Joback Method
tf	268.56	K	Joback Method
vc	0.622	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	368.78	J/mol×K	575.54	Joback Method
cpg	384.75	J/mol×K	614.66	Joback Method
cpg	399.41	J/mol×K	653.77	Joback Method
cpg	412.87	J/mol×K	692.89	Joback Method
cpg	425.22	J/mol×K	732.01	Joback Method
cpg	436.55	J/mol×K	771.12	Joback Method
cpg	446.96	J/mol×K	810.24	Joback Method

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=C643765&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume