Acetamide, n,n'-(4,6-difluoro-2-nitro-m-phenylene)bis-

Inchi: InChI=1S/C10H9F2N3O4/c1-4(16)13-8-6(11)3-7(12)9(14-5(2)17)10(8)15(18)19/h3H,1-2H

InchiKey: HGPVHQIKZLZGBE-UHFFFAOYSA-N

Formula: C10H9F2N3O4

SMILES: CC(=O)Nc1c(F)cc(F)c(NC(C)=O)c1[N+](=O)[O-]

Mol. weight [g/mol]: 273.19

CAS: 4140-70-9

Physical Properties

Property code	Value	Unit	Source
gf	-325.92	kJ/mol	Joback Method
hf	-580.28	kJ/mol	Joback Method
hfus	45.06	kJ/mol	Joback Method
hvap	84.10	kJ/mol	Joback Method
log10ws	-3.19		Crippen Method
logp	1.790		Crippen Method
mcvol	172.060	ml/mol	McGowan Method
pc	2976.29	kPa	Joback Method
tb	833.26	K	Joback Method
tc	1059.27	K	Joback Method
tf	628.93	K	Joback Method
vc	0.688	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	484.31	J/mol×K	833.26	Joback Method
cpg	492.96	J/mol×K	870.93	Joback Method
cpg	500.82	J/mol×K	908.60	Joback Method
cpg	507.91	J/mol×K	946.27	Joback Method
cpg	514.25	J/mol×K	983.93	Joback Method
cpg	519.88	J/mol×K	1021.60	Joback Method
cpg	524.80	J/mol×K	1059.27	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=C4140709&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