N,N'-(2-Methyl-1,4-phenylene)bis(N-acetylacetami

Other names: 2,5-Bis-diacetaminotoluene
2-Methylbenzene-1,4-diamine, N1,N1,N4,N4-tetra-acetyl
Inchi: InChI=1S/C15H18N2O4/c1-9-8-14(16(10(2)18)11(3)19)6-7-15(9)17(12(4)20)13(5)21/h6-8
InchiKey: DACDANLCHBOGDA-UHFFFAOYSA-N
Formula: C15H18N2O4
SMILES: CC(=O)N(C(C)=O)c1ccc(N(C(C)=O)C(C)=O)c(C)c1
Mol. weight [g/mol]: 290.31

Physical Properties

Property code	Value	Unit	Source
gf	-125.55	kJ/mol	Joback Method
hf	-454.60	kJ/mol	Joback Method
hfus	40.31	kJ/mol	Joback Method
hvap	83.65	kJ/mol	Joback Method
log10ws	-2.54		Crippen Method
logp	1.794		Crippen Method
mcvol	224.690	ml/mol	McGowan Method
pc	2248.26	kPa	Joback Method
rinpol	2084.00		NIST Webbook
tb	819.60	K	Joback Method
tc	1035.34	K	Joback Method
tf	574.93	K	Joback Method
vc	0.828	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	648.16	J/mol×K	819.60	Joback Method
cpg	660.47	J/mol×K	855.56	Joback Method
cpg	671.82	J/mol×K	891.51	Joback Method
cpg	682.25	J/mol×K	927.47	Joback Method
cpg	691.82	J/mol×K	963.43	Joback Method
cpg	700.58	J/mol×K	999.39	Joback Method
cpg	708.57	J/mol×K	1035.34	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=U373341&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume