di-t-Butylhydrazodicarboxylate

Other names: 1,2-Hydrazinedicarboxylic acid, bis(1,1-dimethylethyl) ester
Di-tert-Butylhydrazodicarboxylate
di-tert-butyl bicarbamate
Inchi: InChI=1S/C10H20N2O4/c1-9(2,3)15-7(13)11-12-8(14)16-10(4,5)6/h1-6H3,(H,11,13)(H,12
InchiKey: TYSZETYVESRFNT-UHFFFAOYSA-N
Formula: C10H20N2O4
SMILES: CC(C)(C)OC(=O)NNC(=O)OC(C)(C)C
Mol. weight [g/mol]: 232.28
CAS: 16466-61-8

Physical Properties

Property code	Value	Unit	Source
gf	-250.06	kJ/mol	Joback Method
hf	-649.89	kJ/mol	Joback Method
hfus	22.60	kJ/mol	Joback Method
hvap	66.45	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	1.951		Crippen Method
mcvol	186.600	ml/mol	McGowan Method
pc	2445.89	kPa	Joback Method
tb	674.66	K	Joback Method
tc	875.96	K	Joback Method
tf	456.94	K	Joback Method
vc	0.692	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	526.38	J/mol×K	674.66	Joback Method
cpg	540.25	J/mol×K	708.21	Joback Method
cpg	553.22	J/mol×K	741.76	Joback Method
cpg	565.35	J/mol×K	775.31	Joback Method
cpg	576.65	J/mol×K	808.86	Joback Method
cpg	587.16	J/mol×K	842.41	Joback Method

cpg	596.92	J/mol×K	875.96	Joback Method

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=C16466618&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
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