Benzoic acid, 2,5-dimethyl-, 2-(2-hydroxy-2-methylpropyl)-2-methylhydrazide

Inchi: InChI=1S/C14H22N2O2/c1-10-6-7-11(2)12(8-10)13(17)15-16(5)9-14(3,4)18/h6-8,18H,9H
InchiKey: BEYJEOWOZTZYLN-UHFFFAOYSA-N
Formula: C14H22N2O2
SMILES: Cc1ccc(C)c(C(=O)NN(C)CC(C)(C)O)c1
Mol. weight [g/mol]: 250.34
CAS: 21629-71-0

Physical Properties

Property code	Value	Unit	Source
gf	97.42	kJ/mol	Joback Method
hf	-271.26	kJ/mol	Joback Method
hfus	31.67	kJ/mol	Joback Method
hvap	80.97	kJ/mol	Joback Method
log10ws	-3.38		Crippen Method
logp	1.651		Crippen Method
mcvol	211.760	ml/mol	McGowan Method
pc	2320.31	kPa	Joback Method
tb	761.79	K	Joback Method
tc	962.98	K	Joback Method
tf	497.30	K	Joback Method
vc	0.778	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	622.12	J/mol×K	761.79	Joback Method
cpg	635.54	J/mol×K	795.32	Joback Method
cpg	648.11	J/mol×K	828.85	Joback Method
cpg	659.88	J/mol×K	862.38	Joback Method
cpg	670.91	J/mol×K	895.91	Joback Method
cpg	681.26	J/mol×K	929.45	Joback Method
cpg	690.99	J/mol×K	962.98	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=C21629710&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