Acetic acid, 2-(2,4-dinitrophenyl) hydrazide

Inchi: InChI=1S/C8H8N4O5/c1-5(13)9-10-7-3-2-6(11(14)15)4-8(7)12(16)17/h2-4,10H,1H3,(H,9
InchiKey: NYZGFEVPHFYXKA-UHFFFAOYSA-N
Formula: C8H8N4O5
SMILES: CC(=O)NNc1ccc([N+](=O)[O-])cc1[N+](=O)[O-]
Mol. weight [g/mol]: 240.17
CAS: 2719-07-5

Physical Properties

Property code	Value	Unit	Source
gf	230.59	kJ/mol	Joback Method
hf	-22.02	kJ/mol	Joback Method
hfus	44.26	kJ/mol	Joback Method
hvap	89.80	kJ/mol	Joback Method
log10ws	-3.16		Crippen Method
logp	0.966		Crippen Method
mcvol	156.190	ml/mol	McGowan Method
pc	4046.64	kPa	Joback Method
tb	876.97	K	Joback Method
tc	1139.02	K	Joback Method
tf	673.85	K	Joback Method
vc	0.616	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	442.69	J/mol×K	876.97	Joback Method
cpg	450.60	J/mol×K	920.64	Joback Method
cpg	457.61	J/mol×K	964.32	Joback Method
cpg	463.78	J/mol×K	1007.99	Joback Method
cpg	469.15	J/mol×K	1051.67	Joback Method
cpg	473.79	J/mol×K	1095.34	Joback Method
cpg	477.74	J/mol×K	1139.02	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=C2719075&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