1-Naphthaleneacethydrazide

Other names: 2-(1-Naphthyl)acethydrazide
Inchi: InChI=1S/C12H12N2O/c13-14-12(15)8-10-6-3-5-9-4-1-2-7-11(9)10/h1-7H,8,13H2,(H,14,
InchiKey: FLHXVKZDKJAVMB-UHFFFAOYSA-N
Formula: C12H12N2O
SMILES: NNC(=O)Cc1cccc2ccccc12
Mol. weight [g/mol]: 200.24
CAS: 34800-90-3

Physical Properties

Property code	Value	Unit	Source
gf	286.51	kJ/mol	Joback Method
hf	99.80	kJ/mol	Joback Method
hfus	29.40	kJ/mol	Joback Method
hvap	70.71	kJ/mol	Joback Method
log10ws	-3.47		Crippen Method
logp	1.372		Crippen Method
mcvol	158.250	ml/mol	McGowan Method
pc	3560.02	kPa	Joback Method
tb	701.17	K	Joback Method
tc	943.58	K	Joback Method
tf	482.49	K	Joback Method
vc	0.592	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	416.08	J/mol×K	701.17	Joback Method
cpg	428.43	J/mol×K	741.57	Joback Method
cpg	439.79	J/mol×K	781.97	Joback Method
cpg	450.26	J/mol×K	822.38	Joback Method
cpg	459.92	J/mol×K	862.78	Joback Method
cpg	468.87	J/mol×K	903.18	Joback Method
cpg	477.20	J/mol×K	943.58	Joback Method

Sources

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=C34800903&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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