Oleic acid, hydrazide

Inchi: InChI=1S/C18H36N2O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18(21)20-19/h9-10H
InchiKey: GEYKZYNEWQWLTF-KTKRTIGZSA-N
Formula: C18H36N2O
SMILES: CCCCCCCCC=CCCCCCCCC(=O)NN
Mol. weight [g/mol]: 296.49
CAS: 2619-87-6

Physical Properties

Property code	Value	Unit	Source
gf	207.82	kJ/mol	Joback Method
hf	-322.95	kJ/mol	Joback Method
hfus	54.47	kJ/mol	Joback Method
hvap	79.44	kJ/mol	Joback Method
log10ws	-6.60		Crippen Method
logp	5.014		Crippen Method
mcvol	281.710	ml/mol	McGowan Method
pc	1311.80	kPa	Joback Method
tb	791.97	K	Joback Method
tc	978.49	K	Joback Method
tf	473.39	K	Joback Method
vc	1.093	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	878.11	J/mol×K	791.97	Joback Method
cpg	895.56	J/mol×K	823.06	Joback Method
cpg	912.12	J/mol×K	854.14	Joback Method
cpg	927.83	J/mol×K	885.23	Joback Method
cpg	942.74	J/mol×K	916.32	Joback Method
cpg	956.90	J/mol×K	947.41	Joback Method
cpg	970.35	J/mol×K	978.49	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2619876&Units=SI
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

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

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