

m-Nitro carbanilic acid, n-heptyl ester

Other names:	Carbamic acid, N-(3-nitrophenyl)-, heptyl ester
Inchi:	InChI=1S/C14H20N2O4/c1-2-3-4-5-6-10-20-14(17)15-12-8-7-9-13(11-12)16(18)19/h7-9,1
InchiKey:	QUMQINZRKJMTM-UHFFFAOYSA-N
Formula:	C14H20N2O4
SMILES:	CCCCCCCOC(=O)Nc1cccc([N+](=O)[O-])c1
Mol. weight [g/mol]:	280.32
CAS:	93896-50-5

Physical Properties

Property code	Value	Unit	Source
gf	60.80	kJ/mol	Joback Method
hf	-309.32	kJ/mol	Joback Method
hfus	44.91	kJ/mol	Joback Method
hvap	81.88	kJ/mol	Joback Method
log10ws	-4.90		Crippen Method
logp	4.114		Crippen Method
mcvol	219.200	ml/mol	McGowan Method
pc	2113.89	kPa	Joback Method
tb	829.68	K	Joback Method
tc	1051.05	K	Joback Method
tf	554.91	K	Joback Method
vc	0.853	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	658.10	J/molxK	829.68	Joback Method
cpg	671.30	J/molxK	866.57	Joback Method
cpg	683.47	J/molxK	903.47	Joback Method
cpg	694.64	J/molxK	940.36	Joback Method
cpg	704.85	J/molxK	977.26	Joback Method
cpg	714.13	J/molxK	1014.15	Joback Method
cpg	722.52	J/molxK	1051.05	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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=C93896505&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

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