

P-nitro carbanilic acid, n-pentyl ester

Other names:	Pentyl N-(4-nitrophenyl) carbamate
Inchi:	InChI=1S/C12H16N2O4/c1-2-3-4-9-18-12(15)13-10-5-7-11(8-6-10)14(16)17/h5-8H,2-4,9
InchiKey:	PAXRUOYAZXQGOI-UHFFFAOYSA-N
Formula:	C12H16N2O4
SMILES:	CCCCCOC(=O)Nc1ccc([N+](=O)[O-])cc1
Mol. weight [g/mol]:	252.27
CAS:	90429-36-0

Physical Properties

Property code	Value	Unit	Source
gf	43.96	kJ/mol	Joback Method
hf	-268.04	kJ/mol	Joback Method
hfus	39.73	kJ/mol	Joback Method
hvap	77.43	kJ/mol	Joback Method
log10ws	-4.06		Crippen Method
logp	3.333		Crippen Method
mcvol	191.020	ml/mol	McGowan Method
pc	2543.05	kPa	Joback Method
tb	783.92	K	Joback Method
tc	1010.94	K	Joback Method
tf	532.37	K	Joback Method
vc	0.741	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	548.49	J/molxK	783.92	Joback Method
cpg	561.07	J/molxK	821.76	Joback Method
cpg	572.65	J/molxK	859.59	Joback Method
cpg	583.28	J/molxK	897.43	Joback Method
cpg	592.97	J/molxK	935.27	Joback Method
cpg	601.77	J/molxK	973.11	Joback Method
cpg	609.70	J/molxK	1010.94	Joback Method
hfust	25.98	kJ/mol	363.80	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C90429360&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
hfust:	Enthalpy of fusion at a given temperature
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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