Prilocaine

Other names:	Propanamide, N-(2-methylphenyl)-2-(propylamino)-
	o-Methyl-2-propylaminopropionanilide
	o-Propionotoluidide, 2-(propylamino)-
	o-Propionotuluidide, 2-propylamino-
	Astra 1512
	Astra 1515
	Citanest
	L-67
	Propitocaine
	2-Methyl-«alpha»-propylaminopropionanilide
	o-Methyl-«alpha»-propylaminopropionanilide
	«alpha»-n-Propyl-amino-2-methylpropionanilide
	2-(Propylamino)-o-propionotoluidide
	(.+/-.)-Prilocaine
	NSC 40027
Inchi:	InChI=1S/C13H20N2O/c1-4-9-14-11(3)13(16)15-12-8-6-5-7-10(12)2/h5-8,11,14H,4,9H2,
InchiKey:	MVFGUOIZUNYYSO-UHFFFAOYSA-N
Formula:	C13H20N2O
SMILES:	CCCNC(C)C(=O)Nc1ccccc1C
Mol. weight [g/mol]:	220.31
CAS:	721-50-6

Physical Properties

Property code	Value	Unit	Source
gf	208.78	kJ/mol	Joback Method
hf	-97.51	kJ/mol	Joback Method
hfus	31.35	kJ/mol	Joback Method
hvap	66.70	kJ/mol	Joback Method
log10ws	-3.13		Crippen Method
logp	2.322		Crippen Method
mcvol	191.800	ml/mol	McGowan Method
pc	2372.59	kPa	Joback Method
rinpol	1822.00		NIST Webbook
rinpol	1800.00		NIST Webbook
rinpol	1840.00		NIST Webbook
rinpol	1825.00		NIST Webbook
rinpol	1800.00		NIST Webbook

rinpol	1800.00		NIST Webbook
rinpol	1800.00		NIST Webbook
rinpol	1811.00		NIST Webbook
rinpol	1822.00		NIST Webbook
rinpol	1825.00		NIST Webbook
rinpol	1811.00		NIST Webbook
rinpol	1829.00		NIST Webbook
rinpol	1811.00		NIST Webbook
rinpol	1825.00		NIST Webbook
tb	682.27	K	Joback Method
tc	891.85	K	Joback Method
tf	415.46	K	Joback Method
vc	0.726	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	524.37	J/mol×K	682.27	Joback Method
cpg	539.70	J/mol×K	717.20	Joback Method
cpg	554.06	J/mol×K	752.13	Joback Method
cpg	567.50	J/mol×K	787.06	Joback Method
cpg	580.05	J/mol×K	821.99	Joback Method
cpg	591.77	J/mol×K	856.92	Joback Method
cpg	602.68	J/mol×K	891.85	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=C721506&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume