Propyzamide

Other names:	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide
	3,5-Dichloro-N-(1,1-dimethylpropynyl)benzamide
	3,5-dichloro-N-(1,1-dimethylprop-2-ynyl)benzamide
	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
	Campbell's rapier
	Kerb
	Kerb 50W
	Kerb propyzamide 50
	N-(1,1-Dimethylpropynyl)-3,5-dichlorobenzamide
	Promamide
	Pronamid
	Pronamide
	RH 315
	benzamide, 3,5-dichloro-N-(1,1-dimethylpropynyl)-
Inchi:	InChI=1S/C12H11Cl2NO/c1-4-12(2,3)15-11(16)8-5-9(13)7-10(14)6-8/h1,5-7H,2-3H3,(H,1
InchiKey:	PHNUZKMIPFFYSO-UHFFFAOYSA-N
Formula:	C12H11Cl2NO
SMILES:	C#CC(C)(C)NC(=O)c1cc(Cl)cc(Cl)c1
Mol. weight [g/mol]:	256.13
CAS:	23950-58-5

Physical Properties

Property code	Value	Unit	Source
gf	305.83	kJ/mol	Joback Method
hf	115.14	kJ/mol	Joback Method
hfus	30.75	kJ/mol	Joback Method
hvap	66.42	kJ/mol	Joback Method
log10ws	-4.23		Aqueous Solubility Prediction Method
logp	3.135		Crippen Method
mcvol	183.610	ml/mol	McGowan Method
pc	2770.08	kPa	Joback Method
rinpol	1787.00		NIST Webbook
rinpol	1789.00		NIST Webbook
rinpol	1797.00		NIST Webbook
rinpol	1786.00		NIST Webbook
rinpol	1789.00		NIST Webbook

rinpol	1778.00		NIST Webbook
rinpol	1786.00		NIST Webbook
rinpol	297.57		NIST Webbook
rinpol	300.49		NIST Webbook
rinpol	1778.00		NIST Webbook
rinpol	1787.00		NIST Webbook
rinpol	1794.00		NIST Webbook
rinpol	1777.00		NIST Webbook
rinpol	1774.00		NIST Webbook
rinpol	1760.00		NIST Webbook
rinpol	1747.00		NIST Webbook
tb	676.39	K	Joback Method
tc	920.89	K	Joback Method
tf	429.68 ± 0.20	K	NIST Webbook
tf	352.80	K	Aqueous Solubility Prediction Method
vc	0.690	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	470.26	J/mol×K	839.39	Joback Method
cpg	478.67	J/mol×K	880.14	Joback Method
cpg	428.49	J/mol×K	676.39	Joback Method
cpg	440.33	J/mol×K	717.14	Joback Method
cpg	451.18	J/mol×K	757.89	Joback Method
cpg	461.12	J/mol×K	798.64	Joback Method
cpg	486.44	J/mol×K	920.89	Joback Method
hfust	28.68	kJ/mol	428.40	NIST Webbook
rhos	1349.00	kg/m3	298.00	Measurement and correlation of solubility of pronamide in five organic solvents at (278.15-323.15) K

Sources

Measurement and correlation of solubility of pronamide in five organic solvents at (278.15-323.15) K: https://www.doi.org/10.1016/j.jct.2016.03.039

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C23950585&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
rhos:	Solid Density
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume