Benzamide, 2-chloro-N-(2-chlorobenzoyl)-N-decyl-

Inchi: InChI=1S/C24H29Cl2NO2/c1-2-3-4-5-6-7-8-13-18-27(23(28)19-14-9-11-16-21(19)25)24(

InchiKey: QWHKRHBHRNIJLM-UHFFFAOYSA-N

Formula: C24H29Cl2NO2

SMILES: CCCCCCCCCCN(C(=O)c1ccccc1Cl)C(=O)c1ccccc1Cl

Mol. weight [g/mol]: 434.40

Physical Properties

Property code	Value	Unit	Source
gf	185.84	kJ/mol	Joback Method
hf	-277.68	kJ/mol	Joback Method
hfus	59.83	kJ/mol	Joback Method
hvap	99.20	kJ/mol	Joback Method
log10ws	-8.72		Crippen Method
logp	7.417		Crippen Method
mcvol	339.100	ml/mol	McGowan Method
pc	1239.83	kPa	Joback Method
rinpol	3139.00		NIST Webbook
rinpol	3139.00		NIST Webbook
tb	1006.88	K	Joback Method
tc	1238.46	K	Joback Method
tf	630.29	K	Joback Method
vc	1.292	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1049.55	J/mol×K	1006.88	Joback Method
cpg	1063.27	J/mol×K	1045.48	Joback Method
cpg	1075.97	J/mol×K	1084.07	Joback Method
cpg	1087.74	J/mol×K	1122.67	Joback Method
cpg	1098.71	J/mol×K	1161.26	Joback Method
cpg	1108.97	J/mol×K	1199.86	Joback Method
cpg	1118.64	J/mol×K	1238.46	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U407504&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume