

Sarcosine, N-(4-chlorobenzoyl)-, tetradecyl ester

Inchi:	InChI=1S/C24H38ClNO3/c1-3-4-5-6-7-8-9-10-11-12-13-14-19-29-23(27)20-26(2)24(28)2
InchiKey:	GVTFKZULRJMDTB-UHFFFAOYSA-N
Formula:	C24H38ClNO3
SMILES:	CCCCCCCCCCCCCOC(=O)CN(C)C(=O)c1ccc(Cl)cc1
Mol. weight [g/mol]:	424.02

Physical Properties

Property code	Value	Unit	Source
gf	-10.01	kJ/mol	Joback Method
hf	-619.22	kJ/mol	Joback Method
hfus	63.17	kJ/mol	Joback Method
hvap	94.29	kJ/mol	Joback Method
log10ws	-7.44		Crippen Method
logp	6.656		Crippen Method
mcvol	356.490	ml/mol	McGowan Method
pc	1016.83	kPa	Joback Method
tb	960.21	K	Joback Method
tc	1175.66	K	Joback Method
tf	583.66	K	Joback Method
vc	1.369	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1160.44	J/molxK	960.21	Joback Method
cpg	1177.06	J/molxK	996.12	Joback Method
cpg	1192.43	J/molxK	1032.03	Joback Method
cpg	1206.61	J/molxK	1067.94	Joback Method
cpg	1219.67	J/molxK	1103.84	Joback Method
cpg	1231.67	J/molxK	1139.75	Joback Method
cpg	1242.70	J/molxK	1175.66	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=U321359&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
mccvol:	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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