

Sarcosine, N-(4-butylbenzoyl)-, propyl ester

Inchi:	InChI=1S/C17H25NO3/c1-4-6-7-14-8-10-15(11-9-14)17(20)18(3)13-16(19)21-12-5-2/h8-
InchiKey:	GBQUFEJLMVRPER-UHFFFAOYSA-N
Formula:	C17H25NO3
SMILES:	CCCCc1ccc(C(=O)N(C)CC(=O)OCCC)cc1
Mol. weight [g/mol]:	291.39

Physical Properties

Property code	Value	Unit	Source
gf	-57.02	kJ/mol	Joback Method
hf	-459.00	kJ/mol	Joback Method
hfus	40.84	kJ/mol	Joback Method
hvap	74.32	kJ/mol	Joback Method
log10ws	-3.79		Crippen Method
logp	3.054		Crippen Method
mvol	245.620	ml/mol	McGowan Method
pc	1697.70	kPa	Joback Method
rinpol	2303.00		NIST Webbook
rinpol	2303.00		NIST Webbook
tb	762.62	K	Joback Method
tc	962.22	K	Joback Method
tf	474.85	K	Joback Method
vc	0.927	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	716.91	J/mol×K	762.62	Joback Method
cpg	732.79	J/mol×K	795.89	Joback Method
cpg	747.65	J/mol×K	829.15	Joback Method
cpg	761.54	J/mol×K	862.42	Joback Method
cpg	774.49	J/mol×K	895.69	Joback Method
cpg	786.53	J/mol×K	928.95	Joback Method
cpg	797.70	J/mol×K	962.22	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321134&Units=SI
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

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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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