

Sarcosine, N-(2-methoxybenzoyl)-, octyl ester

Inchi:	InChI=1S/C19H29NO4/c1-4-5-6-7-8-11-14-24-18(21)15-20(2)19(22)16-12-9-10-13-17(16)
InchiKey:	UIHLIJGRHRJUPB-UHFFFAOYSA-N
Formula:	C19H29NO4
SMILES:	CCCCCCCCOC(=O)CN(C)C(=O)c1ccccc1OC
Mol. weight [g/mol]:	335.44

Physical Properties

Property code	Value	Unit	Source
gf	-145.18	kJ/mol	Joback Method
hf	-632.50	kJ/mol	Joback Method
hfus	47.21	kJ/mol	Joback Method
hvap	81.18	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	3.671		Crippen Method
mvol	279.670	ml/mol	McGowan Method
pc	1439.16	kPa	Joback Method
rinpol	2550.00		NIST Webbook
rinpol	2550.00		NIST Webbook
tb	830.80	K	Joback Method
tc	1030.02	K	Joback Method
tf	519.62	K	Joback Method
vc	1.058	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	861.13	J/molxK	830.80	Joback Method
cpg	877.06	J/molxK	864.00	Joback Method
cpg	891.89	J/molxK	897.21	Joback Method
cpg	905.64	J/molxK	930.41	Joback Method
cpg	918.33	J/molxK	963.61	Joback Method
cpg	929.99	J/molxK	996.82	Joback Method
cpg	940.66	J/molxK	1030.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U321146&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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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