

Sarcosine, n-heptafluorobutyryl-, octadecyl ester

Inchi:	InChI=1S/C25H42F7NO3/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-36-21(34)20
InchiKey:	LGEZHUOBMHLAQZ-UHFFFAOYSA-N
Formula:	C25H42F7NO3
SMILES:	CCCCCCCCCCCCCCCCCOC(=O)CN(C)C(=O)C(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	537.59

Physical Properties

Property code	Value	Unit	Source
gf	-1447.59	kJ/mol	Joback Method
hf	-2248.20	kJ/mol	Joback Method
hfus	67.23	kJ/mol	Joback Method
hvap	79.58	kJ/mol	Joback Method
log10ws	-8.79		Crippen Method
logp	8.082		Crippen Method
mvol	394.490	ml/mol	McGowan Method
pc	703.96	kPa	Joback Method
rinpol	2629.00		NIST Webbook
rinpol	2629.00		NIST Webbook
tb	899.20	K	Joback Method
tc	1112.76	K	Joback Method
tf	537.46	K	Joback Method
vc	1.577	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1342.50	J/molxK	899.20	Joback Method
cpg	1363.10	J/molxK	934.79	Joback Method
cpg	1382.40	J/molxK	970.39	Joback Method
cpg	1400.54	J/molxK	1005.98	Joback Method
cpg	1417.65	J/molxK	1041.57	Joback Method
cpg	1433.88	J/molxK	1077.16	Joback Method
cpg	1449.36	J/molxK	1112.76	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U321269&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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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