

DL-Alanine, N-methyl-N-octyloxycarbonyl-, pentadecyl ester

Inchi: InChI=1S/C28H55NO4/c1-5-7-9-11-13-14-15-16-17-18-19-21-22-24-32-27(30)26(3)29(4)
InchiKey: AYWSWQRDCSQGRA-UHFFFAOYSA-N
Formula: C28H55NO4
SMILES: CCCCCCCCCCCCCCOC(=O)C(C)N(C)C(=O)OCCCCCCCC
Mol. weight [g/mol]: 469.74

Physical Properties

Property code	Value	Unit	Source
gf	-174.62	kJ/mol	Joback Method
hf	-1048.60	kJ/mol	Joback Method
hfus	73.35	kJ/mol	Joback Method
hvap	97.89	kJ/mol	Joback Method
log10ws	-8.93		Crippen Method
logp	8.438		Crippen Method
mcvol	430.240	ml/mol	McGowan Method
pc	689.61	kPa	Joback Method
rinpol	3052.00		NIST Webbook
rinpol	3052.00		NIST Webbook
tb	1004.62	K	Joback Method
tc	1249.72	K	Joback Method
tf	567.11	K	Joback Method
vc	1.663	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1520.21	J/mol×K	1004.62	Joback Method
cpg	1543.11	J/mol×K	1045.47	Joback Method
cpg	1563.91	J/mol×K	1086.32	Joback Method
cpg	1582.70	J/mol×K	1127.17	Joback Method
cpg	1599.58	J/mol×K	1168.02	Joback Method
cpg	1614.63	J/mol×K	1208.87	Joback Method
cpg	1627.96	J/mol×K	1249.72	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U392656&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.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
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
rinsol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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