

D-Alanine, N-(4-ethylbenzoyl)-, pentyl ester

Inchi:	InChI=1S/C17H25NO3/c1-4-6-7-12-21-17(20)13(3)18-16(19)15-10-8-14(5-2)9-11-15/h8-
InchiKey:	IXZURCQNPSXJAY-UHFFFAOYSA-N
Formula:	C17H25NO3
SMILES:	CCCCCOC(=O)C(C)NC(=O)c1ccc(CC)cc1
Mol. weight [g/mol]:	291.39

Physical Properties

Property code	Value	Unit	Source
gf	-80.85	kJ/mol	Joback Method
hf	-478.34	kJ/mol	Joback Method
hfus	39.40	kJ/mol	Joback Method
hvap	78.32	kJ/mol	Joback Method
log10ws	-4.52		Crippen Method
logp	3.101		Crippen Method
mvol	245.620	ml/mol	McGowan Method
pc	1730.34	kPa	Joback Method
rinpol	2327.00		NIST Webbook
tb	799.91	K	Joback Method
tc	1005.41	K	Joback Method
tf	480.04	K	Joback Method
vc	0.939	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	733.88	J/molxK	799.91	Joback Method
cpg	749.14	J/molxK	834.16	Joback Method
cpg	763.35	J/molxK	868.41	Joback Method
cpg	776.54	J/molxK	902.66	Joback Method
cpg	788.75	J/molxK	936.91	Joback Method
cpg	800.01	J/molxK	971.16	Joback Method
cpg	810.35	J/molxK	1005.41	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U354086&Units=SI
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

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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