

# L-Valine, N-(3,4-difluorobenzoyl)-, pentyl ester

**Inchi:** InChI=1S/C17H23F2NO3/c1-4-5-6-9-23-17(22)15(11(2)3)20-16(21)12-7-8-13(18)14(19)1  
**InchiKey:** AECPSUWIVIULHV-UHFFFAOYSA-N  
**Formula:** C17H23F2NO3  
**SMILES:** CCCCCOC(=O)C(NC(=O)c1ccc(F)c(F)c1)C(C)C  
**Mol. weight [g/mol]:** 327.37

## Physical Properties

Property code	Value	Unit	Source
gf	-482.54	kJ/mol	Joback Method
hf	-887.31	kJ/mol	Joback Method
hfus	41.65	kJ/mol	Joback Method
hvap	76.96	kJ/mol	Joback Method
log10ws	-4.98		Crippen Method
logp	3.453		Crippen Method
mvol	249.160	ml/mol	McGowan Method
pc	1598.72	kPa	Joback Method
rinpol	2122.00		NIST Webbook
rinpol	2122.00		NIST Webbook
tb	802.99	K	Joback Method
tc	1000.67	K	Joback Method
tf	478.74	K	Joback Method
vc	0.969	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	748.67	J/mol×K	802.99	Joback Method
cpg	763.02	J/mol×K	835.94	Joback Method
cpg	776.39	J/mol×K	868.88	Joback Method
cpg	788.81	J/mol×K	901.83	Joback Method
cpg	800.30	J/mol×K	934.78	Joback Method
cpg	810.89	J/mol×K	967.72	Joback Method
cpg	820.60	J/mol×K	1000.67	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U346503&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U346503&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvp:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinp:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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