

# Benzamide, 3,4-difluoro-N-(3,4-difluorobenzoyl)-N-(2-ethylhexyl)

Inchi: InChI=1S/C22H23F4NO2/c1-3-5-6-14(4-2)13-27(21(28)15-7-9-17(23)19(25)11-15)22(29)

InchiKey: AAWBNHVHJXVJRK-UHFFFAOYSA-N

Formula: C22H23F4NO2

SMILES: CCCCC(CC)CN(C(=O)c1ccc(F)c(F)c1)C(=O)c1ccc(F)c(F)c1

Mol. weight [g/mol]: 409.42

## Physical Properties

Property code	Value	Unit	Source
gf	-608.08	kJ/mol	Joback Method
hf	-1017.58	kJ/mol	Joback Method
hfus	54.28	kJ/mol	Joback Method
hvap	83.64	kJ/mol	Joback Method
log10ws	-7.60		Crippen Method
logp	5.742		Crippen Method
mcvol	293.520	ml/mol	McGowan Method
pc	1297.66	kPa	Joback Method
rinpol	2261.00		NIST Webbook
rinpol	2261.00		NIST Webbook
tb	892.86	K	Joback Method
tc	1099.92	K	Joback Method
tf	560.31	K	Joback Method
vc	1.147	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	910.37	J/mol×K	892.86	Joback Method
cpg	924.21	J/mol×K	927.37	Joback Method
cpg	937.00	J/mol×K	961.88	Joback Method
cpg	948.82	J/mol×K	996.39	Joback Method
cpg	959.73	J/mol×K	1030.90	Joback Method
cpg	969.78	J/mol×K	1065.41	Joback Method
cpg	979.03	J/mol×K	1099.92	Joback Method

# Sources

<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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U407812&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U407812&amp;Units=SI</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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