

# Benzamide, 3-fluoro-5-trifluoromethyl-N-decyl-

<b>Inchi:</b>	InChI=1S/C18H25F4NO/c1-2-3-4-5-6-7-8-9-10-23-17(24)14-11-15(18(20,21)22)13-16(19)
<b>InchiKey:</b>	XFYIKPNSRBWZHU-UHFFFAOYSA-N
<b>Formula:</b>	C18H25F4NO
<b>SMILES:</b>	CCCCCCCCCNC(=O)c1cc(F)cc(C(F)(F)F)c1
<b>Mol. weight [g/mol]:</b>	347.39

## Physical Properties

Property code	Value	Unit	Source
gf	-622.10	kJ/mol	Joback Method
hf	-1053.56	kJ/mol	Joback Method
hfus	47.24	kJ/mol	Joback Method
hvap	67.88	kJ/mol	Joback Method
log10ws	-7.02		Crippen Method
logp	5.715		Crippen Method
mvol	259.350	ml/mol	McGowan Method
pc	1341.76	kPa	Joback Method
rinpol	2113.00		NIST Webbook
rinpol	2113.00		NIST Webbook
tb	745.77	K	Joback Method
tc	927.32	K	Joback Method
tf	451.45	K	Joback Method
vc	1.038	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	773.78	J/molxK	745.77	Joback Method
cpg	789.20	J/molxK	776.03	Joback Method
cpg	803.75	J/molxK	806.29	Joback Method
cpg	817.45	J/molxK	836.55	Joback Method
cpg	830.37	J/molxK	866.81	Joback Method
cpg	842.55	J/molxK	897.06	Joback Method
cpg	854.03	J/molxK	927.32	Joback Method

# Sources

<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=U407860&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U407860&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</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>

# 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>h vap:</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>r in pol:</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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