

# Benzamide, N-(3-methylphenyl)-3-trifluoromethyl-

**Inchi:** InChI=1S/C15H12F3NO/c1-10-4-2-7-13(8-10)19-14(20)11-5-3-6-12(9-11)15(16,17)18/h2

**InchiKey:** ZCJUQOSWLFTGFJ-UHFFFAOYSA-N

**Formula:** C15H12F3NO

**SMILES:** Cc1cccc(NC(=O)c2cccc(C(F)(F)F)c2)c1

**Mol. weight [g/mol]:** 279.26

## Physical Properties

Property code	Value	Unit	Source
gf	-340.14	kJ/mol	Joback Method
hf	-559.00	kJ/mol	Joback Method
hfus	30.43	kJ/mol	Joback Method
hvap	64.30	kJ/mol	Joback Method
log10ws	-5.03		Crippen Method
logp	4.266		Crippen Method
mvol	191.550	ml/mol	McGowan Method
pc	2342.82	kPa	Joback Method
rinpol	1969.00		NIST Webbook
rinpol	1969.00		NIST Webbook
tb	704.54	K	Joback Method
tc	926.89	K	Joback Method
tf	443.47	K	Joback Method
vc	0.744	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	517.43	J/molxK	704.54	Joback Method
cpg	530.86	J/molxK	741.60	Joback Method
cpg	543.20	J/molxK	778.66	Joback Method
cpg	554.54	J/molxK	815.71	Joback Method
cpg	564.94	J/molxK	852.77	Joback Method
cpg	574.50	J/molxK	889.83	Joback Method
cpg	583.28	J/molxK	926.89	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=U306935&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U306935&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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