

# Benzamide, 4-(trifluoromethyl)-N-hexadecyl-

<b>Inchi:</b>	InChI=1S/C24H38F3NO/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-20-28-23(29)21-16-18-22
<b>InchiKey:</b>	GDSOMIONMLHTGW-UHFFFAOYSA-N
<b>Formula:</b>	C24H38F3NO
<b>SMILES:</b>	CCCCCCCCCCCCCCCCNC(=O)c1ccc(C(F)(F)F)cc1
<b>Mol. weight [g/mol]:</b>	413.56

## Physical Properties

Property code	Value	Unit	Source
gf	-367.14	kJ/mol	Joback Method
hf	-969.82	kJ/mol	Joback Method
hfus	60.09	kJ/mol	Joback Method
hvap	81.39	kJ/mol	Joback Method
log10ws	-9.20		Crippen Method
logp	7.917		Crippen Method
mvol	342.120	ml/mol	McGowan Method
pc	949.08	kPa	Joback Method
rinpol	2833.00		NIST Webbook
rinpol	2833.00		NIST Webbook
tb	878.80	K	Joback Method
tc	1076.24	K	Joback Method
tf	505.96	K	Joback Method
vc	1.355	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1122.65	J/molxK	878.80	Joback Method
cpg	1140.84	J/molxK	911.71	Joback Method
cpg	1157.95	J/molxK	944.61	Joback Method
cpg	1174.06	J/molxK	977.52	Joback Method
cpg	1189.25	J/molxK	1010.42	Joback Method
cpg	1203.59	J/molxK	1043.33	Joback Method
cpg	1217.17	J/molxK	1076.24	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=U407310&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U407310&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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

Latest version available from:

<https://www.cheméo.com/cid/112-912-4/Benzamide-4-trifluoromethyl-N-hexadecyl.pdf>

Generated by Cheméo on 2024-04-30 10:05:00.760454886 +0000 UTC m=+16760749.681032201.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.