

Acetanilide, 4(2'-butyl)-

Inchi:	InChI=1S/C12H17NO/c1-4-9(2)11-5-7-12(8-6-11)13-10(3)14/h5-9H,4H2,1-3H3,(H,13,14)
InchiKey:	JKXFRPRYOU DIED-UHFFFAOYSA-N
Formula:	C12H17NO
SMILES:	CCC(C)c1ccc(NC(C)=O)cc1
Mol. weight [g/mol]:	191.27
CAS:	20331-25-3

Physical Properties

Property code	Value	Unit	Source
gf	110.97	kJ/mol	Joback Method
hf	-130.34	kJ/mol	Joback Method
hfus	23.66	kJ/mol	Joback Method
hvap	58.04	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	3.158		Crippen Method
mcvol	167.730	ml/mol	McGowan Method
pc	2576.72	kPa	Joback Method
tb	609.22	K	Joback Method
tc	822.57	K	Joback Method
tf	351.53	K	Joback Method
vc	0.634	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	420.02	J/molxK	609.22	Joback Method
cpg	435.36	J/molxK	644.78	Joback Method
cpg	449.76	J/molxK	680.34	Joback Method
cpg	463.27	J/molxK	715.89	Joback Method
cpg	475.92	J/molxK	751.45	Joback Method
cpg	487.74	J/molxK	787.01	Joback Method
cpg	498.77	J/molxK	822.57	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C20331253&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

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

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