

Carbamic acid, 3-methylphenyl-, isobutyl ester

Other names:	Isobutylcarbamate, N-(3-methylphenyl)
Inchi:	InChI=1S/C12H17NO2/c1-9(2)8-15-12(14)13-11-6-4-5-10(3)7-11/h4-7,9H,8H2,1-3H3,(H,
InchiKey:	MXLDHGQMNSRKFX-UHFFFAOYSA-N
Formula:	C12H17NO2
SMILES:	<chem>Cc1cccc(NC(=O)OCC(C)C)c1</chem>
Mol. weight [g/mol]:	207.27

Physical Properties

Property code	Value	Unit	Source
gf	5.97	kJ/mol	Joback Method
hf	-262.56	kJ/mol	Joback Method
hfus	24.85	kJ/mol	Joback Method
hvap	60.45	kJ/mol	Joback Method
log10ws	-3.23		Crippen Method
logp	3.200		Crippen Method
mcvol	173.600	ml/mol	McGowan Method
pc	2532.82	kPa	Joback Method
rinpol	1688.00		NIST Webbook
rinpol	1688.00		NIST Webbook
tb	631.64	K	Joback Method
tc	842.61	K	Joback Method
tf	373.76	K	Joback Method
vc	0.652	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	445.86	J/molxK	631.64	Joback Method
cpg	460.85	J/molxK	666.80	Joback Method
cpg	474.96	J/molxK	701.96	Joback Method
cpg	488.20	J/molxK	737.13	Joback Method
cpg	500.60	J/molxK	772.29	Joback Method
cpg	512.17	J/molxK	807.45	Joback Method
cpg	522.93	J/molxK	842.61	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U314741&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws

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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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