

Benzoic acid, 4-(3-methylbutyl)oxy-, methyl ester

Inchi:	InChI=1S/C13H18O3/c1-10(2)8-9-16-12-6-4-11(5-7-12)13(14)15-3/h4-7,10H,8-9H2,1-3H
InchiKey:	ULKCRLYLWOPDGY-UHFFFAOYSA-N
Formula:	C13H18O3
SMILES:	COC(=O)c1ccc(OCCC(C)C)cc1
Mol. weight [g/mol]:	222.28

Physical Properties

Property code	Value	Unit	Source
gf	-180.00	kJ/mol	Joback Method
hf	-468.89	kJ/mol	Joback Method
hfus	23.53	kJ/mol	Joback Method
hvap	58.65	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	2.898		Crippen Method
mcvol	183.580	ml/mol	McGowan Method
pc	2239.76	kPa	Joback Method
rinpol	1732.00		NIST Webbook
tb	626.77	K	Joback Method
tc	832.59	K	Joback Method
tf	354.60	K	Joback Method
vc	0.692	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	469.86	J/mol×K	626.77	Joback Method
cpg	485.46	J/mol×K	661.07	Joback Method
cpg	500.22	J/mol×K	695.38	Joback Method
cpg	514.14	J/mol×K	729.68	Joback Method
cpg	527.21	J/mol×K	763.98	Joback Method
cpg	539.46	J/mol×K	798.29	Joback Method
cpg	550.88	J/mol×K	832.59	Joback Method
dvisc	0.0014954	Pa×s	354.60	Joback Method
dvisc	0.0007775	Pa×s	399.96	Joback Method

dvisc	0.0004619	Pa×s	445.32	Joback Method
dvisc	0.0003021	Pa×s	490.69	Joback Method
dvisc	0.0002123	Pa×s	536.05	Joback Method
dvisc	0.0001577	Pa×s	581.41	Joback Method
dvisc	0.0001222	Pa×s	626.77	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=U375327&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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