1-Butanol, 4-methoxy-

Other names:	Dowanol BMAT
	4-Methoxy-1-butanol
	4-Methoxybutanol-1
	Butylene glycol methyl ether
	Butylene glycol monomethyl ether
	Dowanol bm
	4-Methoxybutanol
	4-Methoxybutyl alcohol
	NSC 245191
	4-methoxybutan-1-ol
Inchi:	InChI=1S/C5H12O2/c1-7-5-3-2-4-6/h6H,2-5H2,1H3
InchiKey:	KOVAQMSVARJMPH-UHFFFAOYSA-N
Formula:	C5H12O2
SMILES:	COCCCCO
Mol. weight [g/mol]:	104.15
CAS:	111-32-0

Physical Properties

Property code	Value	Unit	Source
gf	-250.60	kJ/mol	Joback Method
hf	-430.98	kJ/mol	Joback Method
hfus	13.98	kJ/mol	Joback Method
hvap	45.81	kJ/mol	Joback Method
log10ws	-0.27		Crippen Method
logp	0.405		Crippen Method
mcvol	93.050	ml/mol	McGowan Method
pc	3796.32	kPa	Joback Method
rinpol	886.00		NIST Webbook
rinpol	886.00		NIST Webbook
tb	428.40	K	Joback Method
tc	590.36	K	Joback Method
tf	229.16	K	Joback Method
vc	0.352	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.25	J/mol×K	428.40	Joback Method
cpg	199.44	J/mol×K	455.39	Joback Method
cpg	207.39	J/mol×K	482.39	Joback Method
cpg	215.11	J/mol×K	509.38	Joback Method
cpg	222.59	J/mol×K	536.37	Joback Method
cpg	229.83	J/mol×K	563.36	Joback Method
cpg	236.84	J/mol×K	590.36	Joback Method
dvisc	0.0464966	Pa×s	229.16	Joback Method
dvisc	0.0109215	Pa×s	262.37	Joback Method
dvisc	0.0035523	Pa×s	295.57	Joback Method
dvisc	0.0014496	Pa×s	328.78	Joback Method
dvisc	0.0006973	Pa×s	361.99	Joback Method
dvisc	0.0003793	Pa×s	395.19	Joback Method
dvisc	0.0002268	Pa×s	428.40	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C111320&Units=SI

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