Naphthalene, 1-ethoxy-

Other names:	«alpha»-Ethoxynaphthalene
	Ethyl «alpha»-naphthyl ether
	Ethyl 1-naphthyl ether
	1-Ethoxynaphthalene
Inchi:	InChI=1S/C12H12O/c1-2-13-12-9-5-7-10-6-3-4-8-11(10)12/h3-9H,2H2,1H3
InchiKey:	APWZAIZNWQFZBK-UHFFFAOYSA-N
Formula:	C12H12O
SMILES:	CCOc1cccc2ccccc12
Mol. weight [g/mol]:	172.22
CAS:	5328-01-8

Physical Properties

Property code	Value	Unit	Source
gf	154.59	kJ/mol	Joback Method
hf	-7.10	kJ/mol	Joback Method
hfus	18.70	kJ/mol	Joback Method
hvap	49.29	kJ/mol	Joback Method
log10ws	-3.81		Crippen Method
logp	3.239		Crippen Method
mcvol	142.590	ml/mol	McGowan Method
pc	2999.15	kPa	Joback Method
tb	553.70	K	NIST Webbook
tb	552.95 ± 1.00	K	NIST Webbook
tc	774.47	K	Joback Method
tf	318.87	K	Joback Method
vc	0.539	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	320.58	J/mol×K	547.02	Joback Method
cpg	385.29	J/mol×K	736.56	Joback Method
cpg	374.10	J/mol×K	698.65	Joback Method
cpg	362.08	J/mol×K	660.74	Joback Method

cpg	349.19	J/mol×K	622.84	Joback Method
cpg	335.37	J/mol×K	584.93	Joback Method
cpg	395.71	J/mol×K	774.47	Joback Method
dvisc	0.0002598	Pa×s	547.02	Joback Method
dvisc	0.0003081	Pa×s	509.00	Joback Method
dvisc	0.0003755	Pa×s	470.97	Joback Method
dvisc	0.0004738	Pa×s	432.94	Joback Method
dvisc	0.0006252	Pa×s	394.92	Joback Method
dvisc	0.0008752	Pa×s	356.89	Joback Method
dvisc	0.0013276	Pa×s	318.87	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5328018&Units=SI
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

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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume