2-METHOXY-1-NAPHTHALDEHYDE

Other names: 1-Naphthaldehyde, 2-methoxy-
2-Methoxy-1-naphthaldehyde
2-Methoxy-1-naphthalenecarboxaldehyde
Inchi: InChI=1S/C12H10O2/c1-14-12-7-6-9-4-2-3-5-10(9)11(12)8-13/h2-8H,1H3
InchiKey: YIQGLTKAOHRZOL-UHFFFAOYSA-N
Formula: C12H10O2
SMILES: COc1ccc2ccccc2c1C=O
Mol. weight [g/mol]: 186.21

Physical Properties

Property code	Value	Unit	Source
hfus	20.60	kJ/mol	Joback Method
ie	7.88	eV	Cheméo Relay (1.0)
log10ws	-3.16		Cheméo Relay (1.0)
logp	2.661		Crippen Method
mcvol	144.160	ml/mol	McGowan Method
tb	605.81	K	Cheméo Relay (1.0)
tf	348.55	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.73	J/mol×K	600.66	Joback Method
cpg	349.41	J/mol×K	639.13	Joback Method
cpg	361.23	J/mol×K	677.61	Joback Method
cpg	372.23	J/mol×K	716.08	Joback Method
cpg	382.45	J/mol×K	754.56	Joback Method
cpg	391.93	J/mol×K	793.03	Joback Method
cpg	400.73	J/mol×K	831.51	Joback Method
dvisc	0.0013087	Pa×s	373.39	Joback Method
dvisc	0.0009292	Pa×s	411.27	Joback Method
dvisc	0.0006990	Pa×s	449.15	Joback Method
dvisc	0.0005496	Pa×s	487.03	Joback Method
dvisc	0.0004474	Pa×s	524.90	Joback Method

dvisc	0.0003744	Pa×s	562.78	Joback Method
dvisc	0.0003205	Pa×s	600.66	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5392121&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
hfus:	Enthalpy of fusion at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tb:	Normal Boiling Point Temperature
tf:	Normal melting (fusion) point