1-Naphthalenemethanol

Other names: naphthalene-1-methanol
Inchi: InChI=1S/C11H10O/c12-8-10-6-3-5-9-4-1-2-7-11(9)10/h1-7,12H,8H2
InchiKey: PBLNHHSDYFYZNC-UHFFFAOYSA-N
Formula: C11H10O
SMILES: OCc1cccc2ccccc12
Mol. weight [g/mol]: 158.20
CAS: 4780-79-4

Physical Properties

Property code	Value	Unit	Source
gf	114.35	kJ/mol	Joback Method
hf	-6.47	kJ/mol	Joback Method
hfus	19.00	kJ/mol	Joback Method
hsub	102.30 ± 1.90	kJ/mol	NIST Webbook
hvap	61.34	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	2.332		Crippen Method
mcvol	128.500	ml/mol	McGowan Method
pc	3805.69	kPa	Joback Method
tb	593.90	K	Joback Method
tc	810.04	K	Joback Method
tf	346.19	K	Joback Method
vc	0.484	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	301.08	J/mol×K	593.90	Joback Method
cpg	350.29	J/mol×K	774.02	Joback Method
cpg	341.80	J/mol×K	738.00	Joback Method
cpg	332.70	J/mol×K	701.97	Joback Method
cpg	322.92	J/mol×K	665.95	Joback Method
cpg	312.40	J/mol×K	629.92	Joback Method
cpg	358.22	J/mol×K	810.04	Joback Method

dvisc	0.0001309	Pa×s	593.90	Joback Method
dvisc	0.0001850	Pa×s	552.62	Joback Method
dvisc	0.0002765	Pa×s	511.33	Joback Method
dvisc	0.0004435	Pa×s	470.04	Joback Method
dvisc	0.0007791	Pa×s	428.76	Joback Method
dvisc	0.0015432	Pa×s	387.48	Joback Method
dvisc	0.0035979	Pa×s	346.19	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	574.20	K	95.30	NIST Webbook

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=C4780794&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
hsub: Enthalpy of sublimation 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

tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume