

Naphthalene, 1-(2-hydroxypropyl)

Other names:	1-(1-Naphthyl)-2-propanol
Inchi:	InChI=1S/C13H14O/c1-10(14)9-12-7-4-6-11-5-2-3-8-13(11)12/h2-8,10,14H,9H2,1H3
InchiKey:	AWRNNDMJROEECC-UHFFFAOYSA-N
Formula:	C13H14O
SMILES:	CC(O)Cc1cccc2ccccc12
Mol. weight [g/mol]:	186.25
CAS:	27653-13-0

Physical Properties

Property code	Value	Unit	Source
gf	128.75	kJ/mol	Joback Method
hf	-53.03	kJ/mol	Joback Method
hfus	20.66	kJ/mol	Joback Method
hvap	65.40	kJ/mol	Joback Method
log10ws	-3.87		Crippen Method
logp	2.763		Crippen Method
mcvol	156.680	ml/mol	McGowan Method
pc	3069.34	kPa	Joback Method
rinpol	1712.00		NIST Webbook
rinpol	1712.00		NIST Webbook
tb	639.22	K	Joback Method
tc	852.43	K	Joback Method
tf	353.73	K	Joback Method
vc	0.591	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	397.24	J/mol×K	639.22	Joback Method
cpg	454.18	J/mol×K	816.89	Joback Method
cpg	444.27	J/mol×K	781.36	Joback Method
cpg	433.69	J/mol×K	745.82	Joback Method
cpg	422.36	J/mol×K	710.29	Joback Method
cpg	410.24	J/mol×K	674.75	Joback Method

cpg	463.47	J/mol×K	852.43	Joback Method
dvisc	0.0000929	Pa×s	639.22	Joback Method
dvisc	0.0001350	Pa×s	591.64	Joback Method
dvisc	0.0002097	Pa×s	544.06	Joback Method
dvisc	0.0003542	Pa×s	496.48	Joback Method
dvisc	0.0006688	Pa×s	448.89	Joback Method
dvisc	0.0014680	Pa×s	401.31	Joback Method
dvisc	0.0039811	Pa×s	353.73	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C27653130&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
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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