2-nonylnaphthalene

Inchi: InChI=1S/C19H36/c1-2-3-4-5-6-7-8-11-17-14-15-18-12-9-10-13-19(18)16-17/h17-19H,2-
InchiKey: YIXLIPKWKPHBIX-OTWHNJEPSA-N
Formula: C19H26
SMILES: CCCCCCCCCC1CCC2CCCCC2C1
Mol. weight [g/mol]: 254.41
CAS: 61886-67-7

Physical Properties

Property code	Value	Unit	Source
gf	174.49	kJ/mol	Joback Method
hf	-334.87	kJ/mol	Joback Method
hfus	33.91	kJ/mol	Joback Method
hvap	58.09	kJ/mol	Joback Method
log10ws	-6.84		Crippen Method
logp	6.734		Crippen Method
mcvol	256.850	ml/mol	McGowan Method
pc	1356.63	kPa	Joback Method
tb	623.00 ± 5.00	K	NIST Webbook
tc	854.43	K	Joback Method
tf	276.80 ± 1.50	K	NIST Webbook
tf	276.70 ± 3.00	K	NIST Webbook
vc	0.981	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	770.43	J/mol×K	660.01	Joback Method
cpg	795.54	J/mol×K	692.41	Joback Method
cpg	819.27	J/mol×K	724.82	Joback Method
cpg	841.68	J/mol×K	757.22	Joback Method
cpg	862.81	J/mol×K	789.63	Joback Method
cpg	882.72	J/mol×K	822.03	Joback Method
cpg	901.47	J/mol×K	854.43	Joback Method
dvisc	0.0038419	Pa×s	321.45	Joback Method

dvisc	0.0017656	Pa×s	377.88	Joback Method
dvisc	0.0009931	Pa×s	434.30	Joback Method
dvisc	0.0006376	Pa×s	490.73	Joback Method
dvisc	0.0004486	Pa×s	547.16	Joback Method
dvisc	0.0003370	Pa×s	603.58	Joback Method
dvisc	0.0002659	Pa×s	660.01	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61886677&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
KDB:	https://www.cheric.org/research/kdb/hcprop/showprop.php?cmpid=813

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