Heptadecane, 9-hexyl-

Other names: 9-n-Hexylheptadecane
9-Hexyl-heptadecane
Inchi: InChI=1S/C23H48/c1-4-7-10-13-15-18-21-23(20-17-12-9-6-3)22-19-16-14-11-8-5-2/h23H
InchiKey: ZUSMXUXZJCOSPV-UHFFFAOYSA-N
Formula: C23H48
SMILES: CCCCCCCCC(CCCCCC)CCCCCCCC
Mol. weight [g/mol]: 324.63
CAS: 55124-79-3

Physical Properties

Property code	Value	Unit	Source
gf	140.34	kJ/mol	Joback Method
hf	-523.33	kJ/mol	Joback Method
hfus	51.80	kJ/mol	Joback Method
hvap	66.40	kJ/mol	Joback Method
log10ws	-9.21		Crippen Method
logp	9.074		Crippen Method
mcvol	334.930	ml/mol	McGowan Method
pc	855.96	kPa	Joback Method
tb	725.20	K	Joback Method
tc	892.42	K	Joback Method
tf	253.80 ± 0.60	K	NIST Webbook
tf	253.75	K	NIST Webbook
vc	1.317	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1024.67	J/mol×K	725.20	Joback Method
cpg	1047.11	J/mol×K	753.07	Joback Method
cpg	1068.56	J/mol×K	780.94	Joback Method
cpg	1089.04	J/mol×K	808.81	Joback Method
cpg	1108.60	J/mol×K	836.68	Joback Method
cpg	1127.28	J/mol×K	864.55	Joback Method

cpg	1145.09	J/mol×K	892.42	Joback Method
dvisc	0.0035428	Pa×s	333.97	Joback Method
dvisc	0.0010359	Pa×s	399.17	Joback Method
dvisc	0.0004278	Pa×s	464.38	Joback Method
dvisc	0.0002197	Pa×s	529.59	Joback Method
dvisc	0.0001306	Pa×s	594.79	Joback Method
dvisc	0.0000860	Pa×s	659.99	Joback Method
dvisc	0.0000611	Pa×s	725.20	Joback Method
hvapt	82.60	kJ/mol	468.00	NIST Webbook

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C55124793&Units=SI

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
hvapt: Enthalpy of vaporization at a given temperature
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