Pentadecane, 8-methyl

Other names: 8-Methylpentadecane
Inchi: InChI=1S/C16H34/c1-4-6-8-10-12-14-16(3)15-13-11-9-7-5-2/h16H,4-15H2,1-3H3
InchiKey: OUKHTAOLUYDJTA-UHFFFAOYSA-N
Formula: C16H34
SMILES: CCCCCCCC(C)CCCCCCC
Mol. weight [g/mol]: 226.44

Physical Properties

Property code	Value	Unit	Source
gf	81.40	kJ/mol	Joback Method
hf	-378.85	kJ/mol	Joback Method
hfus	33.67	kJ/mol	Joback Method
hvap	50.82	kJ/mol	Joback Method
log10ws	-6.28		Crippen Method
logp	6.344		Crippen Method
mcvol	236.300	ml/mol	McGowan Method
pc	1326.17	kPa	Joback Method
tb	565.04	K	Joback Method
tc	726.28	K	Joback Method
tf	255.08	K	Joback Method
vc	0.925	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	611.96	J/mol×K	565.04	Joback Method
cpg	702.03	J/mol×K	699.40	Joback Method
cpg	685.47	J/mol×K	672.53	Joback Method
cpg	668.20	J/mol×K	645.66	Joback Method
cpg	650.21	J/mol×K	618.79	Joback Method
cpg	631.47	J/mol×K	591.91	Joback Method
cpg	717.90	J/mol×K	726.28	Joback Method
dvisc	0.0001427	Pa×s	565.04	Joback Method
dvisc	0.0001985	Pa×s	513.38	Joback Method

dvisc	0.0002974	Pa×s	461.72	Joback Method
dvisc	0.0004934	Pa×s	410.06	Joback Method
dvisc	0.0009470	Pa×s	358.40	Joback Method
dvisc	0.0022640	Pa×s	306.74	Joback Method
dvisc	0.0077044	Pa×s	255.08	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
KDB:	https://www.cheric.org/files/research/kdb/mol/mol179.mol
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R9699&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
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