Heneicosane, 7,11-dimethyl-

Inchi: InChI=1S/C23H48/c1-5-7-9-11-12-13-14-16-19-23(4)21-17-20-22(3)18-15-10-8-6-2/h22-2
InchiKey: CKJPPWBOKYPKSZ-UHFFFAOYSA-N
Formula: C23H48
SMILES: CCCCCCCCCCC(C)CCCC(C)CCCCCC
Mol. weight [g/mol]: 324.63

Physical Properties

Property code	Value	Unit	Source
gf	137.90	kJ/mol	Joback Method
hf	-528.61	kJ/mol	Joback Method
hfus	48.28	kJ/mol	Joback Method
hvap	66.02	kJ/mol	Joback Method
log10ws	-8.97		Crippen Method
logp	8.930		Crippen Method
mcvol	334.930	ml/mol	McGowan Method
pc	859.99	kPa	Joback Method
rinpol	2172.00		NIST Webbook
tb	724.76	K	Joback Method
tc	892.98	K	Joback Method
tf	318.97	K	Joback Method
vc	1.312	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1025.05	J/mol×K	724.76	Joback Method
cpg	1047.64	J/mol×K	752.80	Joback Method
cpg	1069.23	J/mol×K	780.83	Joback Method
cpg	1089.83	J/mol×K	808.87	Joback Method
cpg	1109.50	J/mol×K	836.90	Joback Method
cpg	1128.25	J/mol×K	864.94	Joback Method
cpg	1146.14	J/mol×K	892.98	Joback Method
dvisc	0.0049702	Pa×s	318.97	Joback Method
dvisc	0.0012262	Pa×s	386.60	Joback Method

dvisc	0.0004590	Pa×s	454.23	Joback Method
dvisc	0.0002216	Pa×s	521.87	Joback Method
dvisc	0.0001265	Pa×s	589.50	Joback Method
dvisc	0.0000810	Pa×s	657.13	Joback Method
dvisc	0.0000564	Pa×s	724.76	Joback Method

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=R195154&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
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