heptahexacontane

Inchi: InChI=1S/C67H136/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-33-35-37-39-41-43-45
InchiKey: UCWJLUYVHHOFDC-UHFFFAOYSA-N
Formula: C67H136
SMILES: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 941.80
CAS: 7719-90-6

Physical Properties

Property code	Value	Unit	Source
gf	513.26	kJ/mol	Joback Method
hf	-1426.21	kJ/mol	Joback Method
hfus	169.29	kJ/mol	Joback Method
hvap	164.74	kJ/mol	Joback Method
log10ws	-27.87		Crippen Method
logp	26.383		Crippen Method
mcvol	954.890	ml/mol	McGowan Method
pc	170.87	kPa	Joback Method
tb	1732.36	K	Joback Method
tc	7967.78	K	Joback Method
tf	377.30 ± 3.00	K	NIST Webbook
vc	3.788	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	218446.38	J/mol×K	7967.78	Joback Method
cpg	4195.11	J/mol×K	1732.36	Joback Method
cpg	6514.86	J/mol×K	2771.60	Joback Method
cpg	15131.64	J/mol×K	3810.83	Joback Method
cpg	35339.31	J/mol×K	4850.07	Joback Method
cpg	72431.75	J/mol×K	5889.31	Joback Method
cpg	131702.82	J/mol×K	6928.54	Joback Method
dvisc	4.5466557e-08	Pa×s	1732.36	Joback Method
dvisc	0.0000025	Pa×s	844.85	Joback Method

dvisc	0.0000008	Pa×s	992.77	Joback Method
dvisc	0.0000003	Pa×s	1140.69	Joback Method
dvisc	0.0000002	Pa×s	1288.61	Joback Method
dvisc	9.9867966e-08	Pa×s	1436.52	Joback Method
dvisc	6.4954245e-08	Pa×s	1584.44	Joback Method
hvapt	170.90	kJ/mol	798.00	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7719906&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

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