dohexacontane

Inchi:	InChI=1S/C62H126/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-33-35-37-39-41-43-45
InchiKey:	NHAQDJWMCPLLCY-UHFFFAOYSA-N
Formula:	C62H126
SMILES:	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	871.66
CAS:	7719-83-7

Physical Properties

Property code	Value	Unit	Source
gf	471.16	kJ/mol	Joback Method
hf	-1323.01	kJ/mol	Joback Method
hfus	156.34	kJ/mol	Joback Method
hvap	306.80 ± 0.10	kJ/mol	NIST Webbook
log10ws	-25.78		Crippen Method
logp	24.432		Crippen Method
mcvol	884.440	ml/mol	McGowan Method
pc	194.52	kPa	Joback Method
tb	1617.96	K	Joback Method
tc	4560.02	K	Joback Method
tf	375.00 ± 6.00	K	NIST Webbook
tf	375.00 ± 4.00	K	NIST Webbook
vc	3.507	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	3793.04	J/mol×K	1617.96	Joback Method
cpg	4295.60	J/mol×K	2108.30	Joback Method
cpg	5397.65	J/mol×K	2598.65	Joback Method
cpg	7613.18	J/mol×K	3088.99	Joback Method
cpg	11456.17	J/mol×K	3579.33	Joback Method
cpg	17440.60	J/mol×K	4069.68	Joback Method
cpg	26080.46	J/mol×K	4560.02	Joback Method
dvisc	0.0000019	Pa×s	926.74	Joback Method

dvisc	0.0000061	Pa×s	788.50	Joback Method
dvisc	0.0000008	Pa×s	1064.99	Joback Method
dvisc	0.0000004	Pa×s	1203.23	Joback Method
dvisc	0.0000002	Pa×s	1341.47	Joback Method
dvisc	0.0000002	Pa×s	1479.72	Joback Method
dvisc	0.0000001	Pa×s	1617.96	Joback Method
hvapt	306.80	kJ/mol	298.15	Hypothetical Thermodynamic Properties: Vapor Pressures and Vaporization Enthalpies of the Even n-Alkanes from C40 to C76 at T = 298.15 K by Correlation-Gas Chromatography. Are the Vaporization Enthalpies a Linear Function of Carbon Number?
hvapt	165.20	kJ/mol	773.00	NIST Webbook

Sources

Hypothetical Thermodynamic Properties: Vapor Pressures and Vaporization Enthalpies of the Even n-Alkanes from C40 to C76 at T = 298.15 K by Correlation-Gas Chromatography. Are the Vaporization Enthalpies a Linear Function of Carbon Number?	https://www.doi.org/10.1021/je7005852
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=C7719837&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
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