

Hentriacontane, 2,6,10,14,18,22,26-heptamethyl

Inchi: InChI=1S/C38H78/c1-10-11-12-20-33(4)22-14-24-35(6)26-16-28-37(8)30-18-31-38(9)29-32
InchiKey: HYWOCBILVMRQRY-UHFFFAOYSA-N
Formula: C38H78
SMILES: CCCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 535.03

Physical Properties

Property code	Value	Unit	Source
gf	252.00	kJ/mol	Joback Method
hf	-864.61	kJ/mol	Joback Method
hfus	69.52	kJ/mol	Joback Method
hvap	97.47	kJ/mol	Joback Method
log10ws	-14.04		Crippen Method
logp	14.061		Crippen Method
mcvol	546.280	ml/mol	McGowan Method
pc	432.22	kPa	Joback Method
rinpol	3288.00		NIST Webbook
rinpol	3298.00		NIST Webbook
rinpol	3298.00		NIST Webbook
rinpol	3288.00		NIST Webbook
rinpol	3288.00		NIST Webbook
rinpol	3298.00		NIST Webbook
tb	1065.76	K	Joback Method
tc	1355.62	K	Joback Method
tf	413.02	K	Joback Method
vc	2.122	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2035.41	J/molxK	1065.76	Joback Method
cpg	2069.78	J/molxK	1114.07	Joback Method
cpg	2101.34	J/molxK	1162.38	Joback Method
cpg	2130.38	J/molxK	1210.69	Joback Method

cpg	2157.19	J/mol×K	1259.00	Joback Method
cpg	2182.07	J/mol×K	1307.31	Joback Method
cpg	2205.32	J/mol×K	1355.62	Joback Method
dvisc	0.0016552	Paxs	413.02	Joback Method
dvisc	0.0002034	Paxs	521.81	Joback Method
dvisc	0.0000515	Paxs	630.60	Joback Method
dvisc	0.0000196	Paxs	739.39	Joback Method
dvisc	0.0000095	Paxs	848.18	Joback Method
dvisc	0.0000055	Paxs	956.97	Joback Method
dvisc	0.0000035	Paxs	1065.76	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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=R213782&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

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