

5-ethylhentriacontane

Inchi:	InChI=1S/C33H68/c1-4-7-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28
InchiKey:	HYHJZCNLWNOXDC-UHFFFAOYSA-N
Formula:	C33H68
SMILES:	CCCCCCCCCCCCCCCCCCCCCCCCCC(C)CCCC
Mol. weight [g/mol]:	464.89

Physical Properties

Property code	Value	Unit	Source
gf	224.54	kJ/mol	Joback Method
hf	-729.73	kJ/mol	Joback Method
hfus	77.70	kJ/mol	Joback Method
hvap	88.66	kJ/mol	Joback Method
log10ws	-13.39		Crippen Method
logp	12.975		Crippen Method
mvol	475.830	ml/mol	McGowan Method
pc	521.73	kPa	Joback Method
rinpol	3268.00		NIST Webbook
tb	954.00	K	Joback Method
tc	1190.48	K	Joback Method
tf	446.67	K	Joback Method
vc	1.877	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1687.02	J/molxK	954.00	Joback Method
cpg	1717.48	J/molxK	993.41	Joback Method
cpg	1745.95	J/molxK	1032.83	Joback Method
cpg	1772.57	J/molxK	1072.24	Joback Method
cpg	1797.49	J/molxK	1111.65	Joback Method
cpg	1820.84	J/molxK	1151.07	Joback Method
cpg	1842.77	J/molxK	1190.48	Joback Method
dvisc	0.0008545	Paxs	446.67	Joback Method
dvisc	0.0002494	Paxs	531.22	Joback Method

dvisc	0.0001021	Paxs	615.78	Joback Method
dvisc	0.0000519	Paxs	700.34	Joback Method
dvisc	0.0000305	Paxs	784.89	Joback Method
dvisc	0.0000199	Paxs	869.44	Joback Method
dvisc	0.0000140	Paxs	954.00	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R269473&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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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