

4,8-dimethyl-triacontane

Inchi: InChI=1S/C32H66/c1-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-28-32
InchiKey: JLPDDWRJNXHIFA-UHFFFAOYSA-N
Formula: C32H66
SMILES: CCCCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CCC
Mol. weight [g/mol]: 450.87

Physical Properties

Property code	Value	Unit	Source
gf	213.68	kJ/mol	Joback Method
hf	-714.37	kJ/mol	Joback Method
hfus	71.59	kJ/mol	Joback Method
hvap	86.05	kJ/mol	Joback Method
log10ws	-12.73		Crippen Method
logp	12.441		Crippen Method
mcvol	461.740	ml/mol	McGowan Method
pc	547.43	kPa	Joback Method
rinpol	3090.00		NIST Webbook
rinpol	3090.00		NIST Webbook
rinpol	3098.00		NIST Webbook
tb	930.68	K	Joback Method
tc	1153.00	K	Joback Method
tf	420.40	K	Joback Method
vc	1.815	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1618.68	J/molxK	930.68	Joback Method
cpg	1647.60	J/molxK	967.73	Joback Method
cpg	1674.72	J/molxK	1004.79	Joback Method
cpg	1700.16	J/molxK	1041.84	Joback Method
cpg	1724.04	J/molxK	1078.89	Joback Method
cpg	1746.45	J/molxK	1115.95	Joback Method
cpg	1767.52	J/molxK	1153.00	Joback Method

dvisc	0.0012543	Paxs	420.40	Joback Method
dvisc	0.0003218	Paxs	505.45	Joback Method
dvisc	0.0001222	Paxs	590.49	Joback Method
dvisc	0.0000592	Paxs	675.54	Joback Method
dvisc	0.0000337	Paxs	760.59	Joback Method
dvisc	0.0000215	Paxs	845.63	Joback Method
dvisc	0.0000149	Paxs	930.68	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=R272538&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
mvol:	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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