

6,10,14,30-tetramethyltetracontane

Inchi: InChI=1S/C44H90/c1-7-9-11-12-13-21-24-28-34-41(3)35-29-25-22-19-17-15-14-16-18-20
InchiKey: UXJZUZZXAPZOKI-UHFFFAOYSA-N
Formula: C44H90
SMILES: CCCCCCCCCC(C)CCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCCC
Mol. weight [g/mol]: 619.19

Physical Properties

Property code	Value	Unit	Source
gf	309.84	kJ/mol	Joback Method
hf	-972.61	kJ/mol	Joback Method
hfus	95.62	kJ/mol	Joback Method
hvap	111.99	kJ/mol	Joback Method
log10ws	-17.27		Crippen Method
logp	16.834		Crippen Method
mcvol	630.820	ml/mol	McGowan Method
pc	341.67	kPa	Joback Method
rinpol	4104.00		NIST Webbook
rinpol	4104.00		NIST Webbook
tb	1204.36	K	Joback Method
tc	1671.51	K	Joback Method
tf	525.64	K	Joback Method
vc	2.475	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	2459.23	J/mol×K	1204.36	Joback Method
cpg	2676.15	J/mol×K	1593.66	Joback Method
cpg	2637.15	J/mol×K	1515.80	Joback Method
cpg	2597.40	J/mol×K	1437.94	Joback Method
cpg	2555.47	J/mol×K	1360.08	Joback Method
cpg	2509.89	J/mol×K	1282.22	Joback Method
cpg	2715.85	J/mol×K	1671.51	Joback Method
dvisc	0.0000017	Paxs	1204.36	Joback Method

dvisc	0.0000025	Paxs	1091.24	Joback Method
dvisc	0.0000041	Paxs	978.12	Joback Method
dvisc	0.0000076	Paxs	865.00	Joback Method
dvisc	0.0000170	Paxs	751.88	Joback Method
dvisc	0.0000503	Paxs	638.76	Joback Method
dvisc	0.0002375	Paxs	525.64	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R331558&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
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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