

4,8,12-Trimethyloctacosane

Inchi:	InChI=1S/C31H64/c1-6-8-9-10-11-12-13-14-15-16-17-18-19-20-24-30(4)26-22-28-31(5)2
InchiKey:	MQARWVHIFSASCF-UHFFFAOYSA-N
Formula:	C31H64
SMILES:	CCCCCCCCCCCCCCCC(C)CCCC(C)CCCC(C)CCC
Mol. weight [g/mol]:	436.84

Physical Properties

Property code	Value	Unit	Source
gf	202.82	kJ/mol	Joback Method
hf	-699.01	kJ/mol	Joback Method
hfus	65.48	kJ/mol	Joback Method
hvap	83.44	kJ/mol	Joback Method
log10ws	-12.07		Crippen Method
logp	11.907		Crippen Method
mcvol	447.650	ml/mol	McGowan Method
pc	575.08	kPa	Joback Method
rinpol	2918.00		NIST Webbook
tb	907.36	K	Joback Method
tc	1117.94	K	Joback Method
tf	394.13	K	Joback Method
vc	1.754	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1550.80	J/molxK	907.36	Joback Method
cpg	1578.45	J/molxK	942.46	Joback Method
cpg	1604.45	J/molxK	977.55	Joback Method
cpg	1628.91	J/molxK	1012.65	Joback Method
cpg	1651.91	J/molxK	1047.75	Joback Method
cpg	1673.55	J/molxK	1082.84	Joback Method
cpg	1693.92	J/molxK	1117.94	Joback Method
dvisc	0.0019270	Paxs	394.13	Joback Method
dvisc	0.0004246	Paxs	479.67	Joback Method

dvisc	0.0001479	Paxs	565.21	Joback Method
dvisc	0.0000680	Paxs	650.75	Joback Method
dvisc	0.0000374	Paxs	736.28	Joback Method
dvisc	0.0000233	Paxs	821.82	Joback Method
dvisc	0.0000159	Paxs	907.36	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R555056&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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