

5,9-dimethyl-tricosane

Inchi:	InChI=1S/C25H52/c1-5-7-9-10-11-12-13-14-15-16-17-18-21-25(4)23-19-22-24(3)20-8-6-2
InchiKey:	SZTXMYBAFLOOHC-UHFFFAOYSA-N
Formula:	C25H52
SMILES:	CCCCCCCCCCCCCCC(C)CCCC(C)CCCC
Mol. weight [g/mol]:	352.68

Physical Properties

Property code	Value	Unit	Source
gf	154.74	kJ/mol	Joback Method
hf	-569.89	kJ/mol	Joback Method
hfus	53.46	kJ/mol	Joback Method
hvap	70.47	kJ/mol	Joback Method
log10ws	-9.80		Crippen Method
logp	9.710		Crippen Method
mcvol	363.110	ml/mol	McGowan Method
pc	770.75	kPa	Joback Method
rinpol	2380.00		NIST Webbook
tb	770.52	K	Joback Method
tc	944.69	K	Joback Method
tf	341.51	K	Joback Method
vc	1.423	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1152.28	J/molxK	770.52	Joback Method
cpg	1175.79	J/molxK	799.55	Joback Method
cpg	1198.20	J/molxK	828.58	Joback Method
cpg	1219.55	J/molxK	857.60	Joback Method
cpg	1239.86	J/molxK	886.63	Joback Method
cpg	1259.20	J/molxK	915.66	Joback Method
cpg	1277.59	J/molxK	944.69	Joback Method
dvisc	0.0037128	Paxs	341.51	Joback Method
dvisc	0.0009256	Paxs	413.01	Joback Method

dvisc	0.0003477	Paxs	484.51	Joback Method
dvisc	0.0001680	Paxs	556.01	Joback Method
dvisc	0.0000958	Paxs	627.52	Joback Method
dvisc	0.0000613	Paxs	699.02	Joback Method
dvisc	0.0000426	Paxs	770.52	Joback Method

Sources

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=R404725&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
mccvol:	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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