

Dotriacontane, 2,10-dimethyl

Other names:	2,10-dimethyldotriacontane
Inchi:	InChI=1S/C34H70/c1-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-25-28-31-34(4
InchiKey:	LSQXZQXUQJSGHV-UHFFFAOYSA-N
Formula:	C34H70
SMILES:	CCCCCCCCCCCCCCCCCCCC(C)CCCCCCC(C)C
Mol. weight [g/mol]:	478.92

Physical Properties

Property code	Value	Unit	Source
gf	230.52	kJ/mol	Joback Method
hf	-755.65	kJ/mol	Joback Method
hfus	76.77	kJ/mol	Joback Method
hvap	90.50	kJ/mol	Joback Method
log10ws	-13.57		Crippen Method
logp	13.221		Crippen Method
mcvol	489.920	ml/mol	McGowan Method
pc	501.37	kPa	Joback Method
rinpol	3297.20		NIST Webbook
rinpol	3291.00		NIST Webbook
rinpol	3298.00		NIST Webbook
rinpol	3291.00		NIST Webbook
rinpol	3297.00		NIST Webbook
tb	976.44	K	Joback Method
tc	1223.09	K	Joback Method
tf	442.94	K	Joback Method
vc	1.927	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1756.26	J/molxK	976.44	Joback Method
cpg	1787.61	J/molxK	1017.55	Joback Method
cpg	1816.81	J/molxK	1058.66	Joback Method
cpg	1844.04	J/molxK	1099.77	Joback Method

cpg	1869.45	J/molxK	1140.87	Joback Method
cpg	1893.20	J/molxK	1181.98	Joback Method
cpg	1915.47	J/molxK	1223.09	Joback Method
dvisc	0.0009072	Paxs	442.94	Joback Method
dvisc	0.0002342	Paxs	531.86	Joback Method
dvisc	0.0000891	Paxs	620.77	Joback Method
dvisc	0.0000432	Paxs	709.69	Joback Method
dvisc	0.0000246	Paxs	798.61	Joback Method
dvisc	0.0000157	Paxs	887.52	Joback Method
dvisc	0.0000109	Paxs	976.44	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R179221&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

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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