

4,8,16-trimethyl-dotriacontane

Inchi:	InChI=1S/C35H72/c1-6-8-9-10-11-12-13-14-15-16-17-18-20-23-28-34(4)29-24-21-19-22
InchiKey:	XAFPRWYKXXBKSF-UHFFFAOYSA-N
Formula:	C35H72
SMILES:	CCCCCCCCCCCCCCCC(C)CCCCCCC(C)CCCC(C)CCC
Mol. weight [g/mol]:	492.95

Physical Properties

Property code	Value	Unit	Source
gf	236.50	kJ/mol	Joback Method
hf	-781.57	kJ/mol	Joback Method
hfus	75.84	kJ/mol	Joback Method
hvap	92.34	kJ/mol	Joback Method
log10ws	-13.75		Crippen Method
logp	13.467		Crippen Method
mvol	504.010	ml/mol	McGowan Method
pc	482.19	kPa	Joback Method
rinpol	3320.00		NIST Webbook
rinpol	3320.00		NIST Webbook
tb	998.88	K	Joback Method
tc	1256.37	K	Joback Method
tf	439.21	K	Joback Method
vc	1.978	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1825.75	J/molxK	998.88	Joback Method
cpg	1858.01	J/molxK	1041.80	Joback Method
cpg	1887.94	J/molxK	1084.71	Joback Method
cpg	1915.76	J/molxK	1127.63	Joback Method
cpg	1941.65	J/molxK	1170.54	Joback Method
cpg	1965.80	J/molxK	1213.46	Joback Method
cpg	1988.40	J/molxK	1256.37	Joback Method
dvisc	0.0009683	Paxs	439.21	Joback Method

dvisc	0.0002197	Paxs	532.49	Joback Method
dvisc	0.0000775	Paxs	625.77	Joback Method
dvisc	0.0000359	Paxs	719.05	Joback Method
dvisc	0.0000198	Paxs	812.32	Joback Method
dvisc	0.0000124	Paxs	905.60	Joback Method
dvisc	0.0000084	Paxs	998.88	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R272489&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.cheméo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	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

Latest version available from:

<https://www.cheméo.com/cid/34-166-0/4-8-16-trimethyl-dotriacontane.pdf>

Generated by Cheméo on 2024-04-17 03:28:09.234003771 +0000 UTC m=+15613738.154581091.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.