

3,7-Dimethylhexacosane

Inchi:	InChI=1S/C28H58/c1-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-24-28(4)26-23-2
InchiKey:	ZCDXJUUTPHJWMM-UHFFFAOYSA-N
Formula:	C28H58
SMILES:	CCCCCCCCCCCCCCCCCCCC(C)CCCC(C)CC
Mol. weight [g/mol]:	394.76

Physical Properties

Property code	Value	Unit	Source
gf	180.00	kJ/mol	Joback Method
hf	-631.81	kJ/mol	Joback Method
hfus	61.23	kJ/mol	Joback Method
hvap	77.15	kJ/mol	Joback Method
log10ws	-11.06		Crippen Method
logp	10.881		Crippen Method
mcvol	405.380	ml/mol	McGowan Method
pc	660.85	kPa	Joback Method
rinsol	2809.00		NIST Webbook
tb	839.16	K	Joback Method
tc	1028.00	K	Joback Method
tf	375.32	K	Joback Method
vc	1.591	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1348.71	J/molxK	839.16	Joback Method
cpg	1462.77	J/molxK	996.53	Joback Method
cpg	1442.36	J/molxK	965.06	Joback Method
cpg	1420.81	J/molxK	933.58	Joback Method
cpg	1398.06	J/molxK	902.11	Joback Method
cpg	1374.05	J/molxK	870.63	Joback Method
cpg	1482.09	J/molxK	1028.00	Joback Method
dvisc	0.0000275	Paxs	839.16	Joback Method
dvisc	0.0000396	Paxs	761.85	Joback Method

dvisc	0.0000620	Paxs	684.55	Joback Method
dvisc	0.0001088	Paxs	607.24	Joback Method
dvisc	0.0002249	Paxs	529.93	Joback Method
dvisc	0.0005956	Paxs	452.63	Joback Method
dvisc	0.0023569	Paxs	375.32	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=R505398&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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