7,11-Dimethylhexacosane

Inchi: InChI=1S/C28H58/c1-5-7-9-11-12-13-14-15-16-17-18-19-21-24-28(4)26-22-25-27(3)23-2
InchiKey: WFTYRXXYPQHOFK-UHFFFAOYSA-N
Formula: C28H58
SMILES: CCCCCCCCCCCCCCCC(C)CCCC(C)CCCCCC
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
rinpol	2675.00		NIST Webbook
rinpol	2675.00		NIST Webbook
tb	839.16	K	Joback Method
tc	1028.00	K	Joback Method
tf	375.32	K	Joback Method
vc	1.591	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1348.71	J/mol×K	839.16	Joback Method
cpg	1374.05	J/mol×K	870.63	Joback Method
cpg	1398.06	J/mol×K	902.11	Joback Method
cpg	1420.81	J/mol×K	933.58	Joback Method
cpg	1442.36	J/mol×K	965.06	Joback Method
cpg	1462.77	J/mol×K	996.53	Joback Method
cpg	1482.09	J/mol×K	1028.00	Joback Method
dvisc	0.0023569	Pa×s	375.32	Joback Method

dvisc	0.0005956	Pa×s	452.63	Joback Method
dvisc	0.0002249	Pa×s	529.93	Joback Method
dvisc	0.0001088	Pa×s	607.24	Joback Method
dvisc	0.0000620	Pa×s	684.55	Joback Method
dvisc	0.0000396	Pa×s	761.85	Joback Method
dvisc	0.0000275	Pa×s	839.16	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R505769&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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

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