Octacosane, 9-methyl

Inchi: InChI=1S/C29H60/c1-4-6-8-10-12-13-14-15-16-17-18-19-20-21-22-24-26-28-29(3)27-25-
InchiKey: HGHNLISXMMUYAJ-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCCCCCCCCCCCCCCCC(C)CCCCCCCC
Mol. weight [g/mol]: 408.79

Physical Properties

Property code	Value	Unit	Source
gf	190.86	kJ/mol	Joback Method
hf	-647.17	kJ/mol	Joback Method
hfus	67.34	kJ/mol	Joback Method
hvap	79.76	kJ/mol	Joback Method
log10ws	-11.72		Crippen Method
logp	11.415		Crippen Method
mcvol	419.470	ml/mol	McGowan Method
pc	626.88	kPa	Joback Method
rinpol	2839.10		NIST Webbook
tb	862.48	K	Joback Method
tc	1058.99	K	Joback Method
tf	401.59	K	Joback Method
vc	1.653	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1415.09	J/mol×K	862.48	Joback Method
cpg	1532.71	J/mol×K	1026.24	Joback Method
cpg	1511.74	J/mol×K	993.49	Joback Method
cpg	1489.57	J/mol×K	960.74	Joback Method
cpg	1466.11	J/mol×K	927.98	Joback Method
cpg	1441.31	J/mol×K	895.23	Joback Method
cpg	1552.54	J/mol×K	1058.99	Joback Method
dvisc	0.0000258	Pa×s	862.48	Joback Method
dvisc	0.0000366	Pa×s	785.66	Joback Method

dvisc	0.0000560	Pa×s	708.85	Joback Method
dvisc	0.0000949	Pa×s	632.04	Joback Method
dvisc	0.0001863	Pa×s	555.22	Joback Method
dvisc	0.0004537	Pa×s	478.40	Joback Method
dvisc	0.0015539	Pa×s	401.59	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R570897&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