7,23-Hentriacontadiene

Inchi: InChI=1S/C31H60/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-30-28-26-24-22-20-18-
InchiKey: IUADKQXYIUGUNB-LDLWNPHPSA-N
Formula: C31H60
SMILES: CCCCCCC=CCCCCCCCCCCCCCCC=CCCCCCCC
Mol. weight [g/mol]: 432.81

Physical Properties

Property code	Value	Unit	Source
gf	370.58	kJ/mol	Joback Method
hf	-448.73	kJ/mol	Joback Method
hfus	76.45	kJ/mol	Joback Method
hvap	84.52	kJ/mol	Joback Method
log10ws	-12.51		Crippen Method
logp	11.891		Crippen Method
mcvol	439.050	ml/mol	McGowan Method
pc	597.80	kPa	Joback Method
rinpol	3052.00		NIST Webbook
rinpol	3052.00		NIST Webbook
tb	917.00	K	Joback Method
tc	1129.40	K	Joback Method
tf	428.97	K	Joback Method
vc	1.732	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1497.04	J/mol×K	917.00	Joback Method
cpg	1523.71	J/mol×K	952.40	Joback Method
cpg	1549.05	J/mol×K	987.80	Joback Method
cpg	1573.15	J/mol×K	1023.20	Joback Method
cpg	1596.15	J/mol×K	1058.60	Joback Method
cpg	1618.16	J/mol×K	1094.00	Joback Method
cpg	1639.31	J/mol×K	1129.40	Joback Method
dvisc	0.0008291	Pa×s	428.97	Joback Method

dvisc	0.0002542	Pa×s	510.31	Joback Method
dvisc	0.0001079	Pa×s	591.65	Joback Method
dvisc	0.0000563	Pa×s	672.99	Joback Method
dvisc	0.0000338	Pa×s	754.32	Joback Method
dvisc	0.0000224	Pa×s	835.66	Joback Method
dvisc	0.0000160	Pa×s	917.00	Joback Method

Sources

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=R406949&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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