9-Triacontene

Other names: triacont-9-ene
Inchi: InChI=1S/C30H60/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-30-28-26-24-22-20-18-16-
InchiKey: KPNPXPYUPBOKRV-HTXNQAPBSA-N
Formula: C30H60
SMILES: CCCCCCCCC=CCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 420.80

Physical Properties

Property code	Value	Unit	Source
gf	281.94	kJ/mol	Joback Method
hf	-545.31	kJ/mol	Joback Method
hfus	73.66	kJ/mol	Joback Method
hvap	82.33	kJ/mol	Joback Method
log10ws	-12.23		Crippen Method
logp	11.725		Crippen Method
mcvol	429.260	ml/mol	McGowan Method
pc	610.87	kPa	Joback Method
rinpol	2994.00		NIST Webbook
rinpol	2970.48		NIST Webbook
tb	889.96	K	Joback Method
tc	1094.86	K	Joback Method
tf	422.78	K	Joback Method
vc	1.696	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1456.08	J/mol×K	889.96	Joback Method
cpg	1482.55	J/mol×K	924.11	Joback Method
cpg	1507.61	J/mol×K	958.26	Joback Method
cpg	1531.37	J/mol×K	992.41	Joback Method
cpg	1553.90	J/mol×K	1026.56	Joback Method
cpg	1575.32	J/mol×K	1060.71	Joback Method
cpg	1595.71	J/mol×K	1094.86	Joback Method

dvisc	0.0010116	Pa×s	422.78	Joback Method
dvisc	0.0003220	Pa×s	500.64	Joback Method
dvisc	0.0001395	Pa×s	578.51	Joback Method
dvisc	0.0000737	Pa×s	656.37	Joback Method
dvisc	0.0000446	Pa×s	734.23	Joback Method
dvisc	0.0000297	Pa×s	812.10	Joback Method
dvisc	0.0000212	Pa×s	889.96	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=R282169&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