(Z)-9-nonacosene

Inchi: InChI=1S/C29H58/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-28-26-24-22-20-18-16-14-
InchiKey: LPRICKRYSNFONS-ZPHPHTNESA-N
Formula: C29H58
SMILES: CCCCCCCCC=CCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 406.77

Physical Properties

Property code	Value	Unit	Source
gf	273.52	kJ/mol	Joback Method
hf	-524.67	kJ/mol	Joback Method
hfus	71.07	kJ/mol	Joback Method
hvap	80.11	kJ/mol	Joback Method
log10ws	-11.82		Crippen Method
logp	11.335		Crippen Method
mcvol	415.170	ml/mol	McGowan Method
pc	640.92	kPa	Joback Method
rinpol	2874.00		NIST Webbook
rinpol	2874.00		NIST Webbook
tb	867.08	K	Joback Method
tc	1064.07	K	Joback Method
tf	411.51	K	Joback Method
vc	1.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1389.20	J/mol×K	867.08	Joback Method
cpg	1414.75	J/mol×K	899.91	Joback Method
cpg	1438.98	J/mol×K	932.74	Joback Method
cpg	1461.99	J/mol×K	965.58	Joback Method
cpg	1483.85	J/mol×K	998.41	Joback Method
cpg	1504.64	J/mol×K	1031.24	Joback Method
cpg	1524.45	J/mol×K	1064.07	Joback Method
dvisc	0.0011611	Pa×s	411.51	Joback Method

dvisc	0.0003705	Pa×s	487.44	Joback Method
dvisc	0.0001609	Pa×s	563.37	Joback Method
dvisc	0.0000852	Pa×s	639.29	Joback Method
dvisc	0.0000516	Pa×s	715.22	Joback Method
dvisc	0.0000344	Pa×s	791.15	Joback Method
dvisc	0.0000246	Pa×s	867.08	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R395641&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

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

Latest version available from:

https://www.chemeo.com/cid/76-340-0/Z-9-nonacosene.pdf

Generated by Cheméo on 2024-04-27 19:13:13.246948413 +0000 UTC m=+16534442.167525770.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.