

(Z)-9-heptacosene

Inchi:	InChI=1S/C27H54/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-26-24-22-20-18-16-14-12-10
InchiKey:	WWHBGRQNRRIORRZ-ZPHPHTNESA-N
Formula:	C27H54
SMILES:	CCCCCCCC=CCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	378.72
CAS:	36258-12-5

Physical Properties

Property code	Value	Unit	Source
gf	256.68	kJ/mol	Joback Method
hf	-483.39	kJ/mol	Joback Method
hfus	65.89	kJ/mol	Joback Method
hvap	75.65	kJ/mol	Joback Method
log10ws	-10.98		Crippen Method
logp	10.555		Crippen Method
mcvol	386.990	ml/mol	McGowan Method
pc	708.09	kPa	Joback Method
rinpol	2671.00		NIST Webbook
rinpol	2673.00		NIST Webbook
rinpol	2672.00		NIST Webbook
ripol	2721.00		NIST Webbook
tb	821.32	K	Joback Method
tc	1005.57	K	Joback Method
tf	388.97	K	Joback Method
vc	1.528	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1257.22	J/molxK	821.32	Joback Method
cpg	1366.23	J/molxK	974.86	Joback Method
cpg	1346.50	J/molxK	944.16	Joback Method
cpg	1325.80	J/molxK	913.45	Joback Method
cpg	1304.06	J/molxK	882.74	Joback Method

cpg	1281.22	J/mol×K	852.03	Joback Method
cpg	1385.05	J/mol×K	1005.57	Joback Method
dvisc	0.0000330	Paxs	821.32	Joback Method
dvisc	0.0000459	Paxs	749.26	Joback Method
dvisc	0.0000686	Paxs	677.20	Joback Method
dvisc	0.0001129	Paxs	605.14	Joback Method
dvisc	0.0002123	Paxs	533.09	Joback Method
dvisc	0.0004867	Paxs	461.03	Joback Method
dvisc	0.0015168	Paxs	388.97	Joback Method

Sources

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=C36258125&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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