2-Nonene, 2-methyl-

Other names: 2-Methyl-2-nonene
Inchi: InChI=1S/C10H20/c1-4-5-6-7-8-9-10(2)3/h9H,4-8H2,1-3H3
InchiKey: UIIMVYYDGLHIAO-UHFFFAOYSA-N
Formula: C10H20
SMILES: CCCCCCC=C(C)C
Mol. weight [g/mol]: 140.27
CAS: 2129-95-5

Physical Properties

Property code	Value	Unit	Source
gf	104.99	kJ/mol	Joback Method
hf	-142.30	kJ/mol	Joback Method
hfus	20.55	kJ/mol	Joback Method
hvap	37.89	kJ/mol	Joback Method
log10ws	-3.86		Crippen Method
logp	3.923		Crippen Method
mcvol	147.460	ml/mol	McGowan Method
pc	2222.89	kPa	Joback Method
rinpol	965.00		NIST Webbook
rinpol	965.00		NIST Webbook
rinpol	964.00		NIST Webbook
rinpol	964.00		NIST Webbook
tb	444.15 ± 1.50	K	NIST Webbook
tc	605.63	K	Joback Method
tf	183.42	K	Joback Method
vc	0.577	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.23	J/mol×K	432.24	Joback Method
cpg	315.43	J/mol×K	461.14	Joback Method
cpg	329.98	J/mol×K	490.04	Joback Method
cpg	343.91	J/mol×K	518.94	Joback Method

cpg	357.23	J/mol×K	547.83	Joback Method
cpg	369.97	J/mol×K	576.73	Joback Method
cpg	382.16	J/mol×K	605.63	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=C2129955&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
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