Nonane, 2-methyl-3-methylene-

Other names: 2-Isopropyl-1-octene
Inchi: InChI=1S/C11H22/c1-5-6-7-8-9-11(4)10(2)3/h10H,4-9H2,1-3H3
InchiKey: RSECDGYTKPKQHR-UHFFFAOYSA-N
Formula: C11H22
SMILES: C=C(CCCCCC)C(C)C
Mol. weight [g/mol]: 154.29
CAS: 55499-08-6

Physical Properties

Property code	Value	Unit	Source
gf	118.59	kJ/mol	Joback Method
hf	-160.01	kJ/mol	Joback Method
hfus	18.13	kJ/mol	Joback Method
hvap	39.10	kJ/mol	Joback Method
log10ws	-4.04		Crippen Method
logp	4.169		Crippen Method
mcvol	161.550	ml/mol	McGowan Method
pc	2030.89	kPa	Joback Method
rinpol	1037.00		NIST Webbook
rinpol	1037.00		NIST Webbook
rinpol	1036.00		NIST Webbook
tb	447.20	K	Joback Method
tc	618.55	K	Joback Method
tf	183.01	K	Joback Method
vc	0.627	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	343.01	J/mol×K	447.20	Joback Method
cpg	359.19	J/mol×K	475.76	Joback Method
cpg	374.71	J/mol×K	504.32	Joback Method
cpg	389.58	J/mol×K	532.87	Joback Method
cpg	403.84	J/mol×K	561.43	Joback Method

cpg	417.49	J/mol×K	589.99	Joback Method
cpg	430.56	J/mol×K	618.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55499086&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
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