1,8-Nonadiene, 2-methyl-5,7-dimethylene-

Other names: 2-Methyl-5,7-dimethylene-1,8-nonadiene
Inchi: InChI=1S/C12H18/c1-6-11(4)9-12(5)8-7-10(2)3/h6H,1-2,4-5,7-9H2,3H3
InchiKey: RCZAYHKXHPHBPX-UHFFFAOYSA-N
Formula: C12H18
SMILES: C=CC(=C)CC(=C)CCC(=C)C
Mol. weight [g/mol]: 162.27

Physical Properties

Property code	Value	Unit	Source
gf	375.87	kJ/mol	Joback Method
hf	181.34	kJ/mol	Joback Method
hfus	17.79	kJ/mol	Joback Method
hvap	39.87	kJ/mol	Joback Method
log10ws	-4.26		Crippen Method
logp	4.031		Crippen Method
mcvol	162.740	ml/mol	McGowan Method
pc	2090.75	kPa	Joback Method
tb	460.32	K	Joback Method
tc	643.48	K	Joback Method
tf	176.08	K	Joback Method
vc	0.634	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	336.50	J/mol×K	460.32	Joback Method
cpg	352.12	J/mol×K	490.85	Joback Method
cpg	366.96	J/mol×K	521.37	Joback Method
cpg	381.04	J/mol×K	551.90	Joback Method
cpg	394.40	J/mol×K	582.42	Joback Method
cpg	407.08	J/mol×K	612.95	Joback Method
cpg	419.11	J/mol×K	643.48	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U152688&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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