2-Nonene, 4,6,8-trimethyl

Inchi: InChI=1S/C12H24/c1-6-7-11(4)9-12(5)8-10(2)3/h6-7,10-12H,8-9H2,1-5H3/b7-6+
InchiKey: LXWJHTNMVCPDHG-VOTSOKGWSA-N
Formula: C12H24
SMILES: CC=CC(C)CC(C)CC(C)C
Mol. weight [g/mol]: 168.32

Physical Properties

Property code	Value	Unit	Source
gf	123.06	kJ/mol	Joback Method
hf	-189.63	kJ/mol	Joback Method
hfus	16.47	kJ/mol	Joback Method
hvap	41.10	kJ/mol	Joback Method
log10ws	-3.97		Crippen Method
logp	4.271		Crippen Method
mcvol	175.640	ml/mol	McGowan Method
pc	1900.26	kPa	Joback Method
rinpol	1067.00		NIST Webbook
tb	476.80	K	Joback Method
tc	655.59	K	Joback Method
tf	174.92	K	Joback Method
vc	0.669	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	391.15	J/mol×K	476.80	Joback Method
cpg	409.03	J/mol×K	506.60	Joback Method
cpg	426.10	J/mol×K	536.40	Joback Method
cpg	442.40	J/mol×K	566.19	Joback Method
cpg	457.95	J/mol×K	595.99	Joback Method
cpg	472.78	J/mol×K	625.79	Joback Method
cpg	486.92	J/mol×K	655.59	Joback Method
dvisc	0.0389720	Pa×s	174.92	Joback Method
dvisc	0.0055227	Pa×s	225.23	Joback Method

dvisc	0.0015975	Pa×s	275.55	Joback Method
dvisc	0.0006778	Pa×s	325.86	Joback Method
dvisc	0.0003617	Pa×s	376.17	Joback Method
dvisc	0.0002239	Pa×s	426.49	Joback Method
dvisc	0.0001533	Pa×s	476.80	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R568295&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
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