(E)-2-Nonene, 4-methyl

Inchi: InChI=1S/C10H20/c1-4-6-7-9-10(3)8-5-2/h5,8,10H,4,6-7,9H2,1-3H3/b8-5+
InchiKey: YWPFKZMYKGXMAP-VMPITWQZSA-N
Formula: C10H20
SMILES: CC=CC(C)CCCCC
Mol. weight [g/mol]: 140.27

Physical Properties

Property code	Value	Unit	Source
gf	111.10	kJ/mol	Joback Method
hf	-137.79	kJ/mol	Joback Method
hfus	18.34	kJ/mol	Joback Method
hvap	37.42	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.779		Crippen Method
mcvol	147.460	ml/mol	McGowan Method
pc	2229.20	kPa	Joback Method
rinpol	954.00		NIST Webbook
rinpol	958.00		NIST Webbook
rinpol	954.00		NIST Webbook
rinpol	951.00		NIST Webbook
tb	431.92	K	Joback Method
tc	605.89	K	Joback Method
tf	182.38	K	Joback Method
vc	0.570	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.30	J/mol×K	431.92	Joback Method
cpg	315.67	J/mol×K	460.92	Joback Method
cpg	330.38	J/mol×K	489.91	Joback Method
cpg	344.46	J/mol×K	518.91	Joback Method
cpg	357.91	J/mol×K	547.90	Joback Method
cpg	370.77	J/mol×K	576.90	Joback Method

cpg	383.07	J/mol×K	605.89	Joback Method
dvisc	0.0103960	Pa×s	182.38	Joback Method
dvisc	0.0028643	Pa×s	223.97	Joback Method
dvisc	0.0011817	Pa×s	265.56	Joback Method
dvisc	0.0006197	Pa×s	307.15	Joback Method
dvisc	0.0003790	Pa×s	348.74	Joback Method
dvisc	0.0002574	Pa×s	390.33	Joback Method
dvisc	0.0001884	Pa×s	431.92	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R42639&Units=SI

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

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.