2,6-Dimethyl 4-octene

Inchi: InChI=1S/C10H20/c1-5-10(4)8-6-7-9(2)3/h6,8-10H,5,7H2,1-4H3/b8-6-
InchiKey: PBPBSFCZFRLBFJ-VURMDHGXSA-N
Formula: C10H20
SMILES: CCC(C)C=CCC(C)C
Mol. weight [g/mol]: 140.27
CAS: 6874-30-2

Physical Properties

Property code	Value	Unit	Source
gf	108.66	kJ/mol	Joback Method
hf	-143.07	kJ/mol	Joback Method
hfus	14.81	kJ/mol	Joback Method
hvap	37.04	kJ/mol	Joback Method
log10ws	-3.38		Crippen Method
logp	3.635		Crippen Method
mcvol	147.460	ml/mol	McGowan Method
pc	2246.13	kPa	Joback Method
tb	431.48	K	Joback Method
tc	609.35	K	Joback Method
tf	167.38	K	Joback Method
vc	0.564	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	300.30	J/mol×K	431.48	Joback Method
cpg	316.10	J/mol×K	461.12	Joback Method
cpg	331.20	J/mol×K	490.77	Joback Method
cpg	345.63	J/mol×K	520.41	Joback Method
cpg	359.41	J/mol×K	550.06	Joback Method
cpg	372.56	J/mol×K	579.70	Joback Method
cpg	385.12	J/mol×K	609.35	Joback Method
dvisc	0.0212319	Pa×s	167.38	Joback Method
dvisc	0.0041931	Pa×s	211.40	Joback Method

dvisc	0.0014484	Pa×s	255.41	Joback Method
dvisc	0.0006839	Pa×s	299.43	Joback Method
dvisc	0.0003914	Pa×s	343.45	Joback Method
dvisc	0.0002543	Pa×s	387.46	Joback Method
dvisc	0.0001804	Pa×s	431.48	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=C6874302&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume