Hexane, 2,3,4,5-tetramethyl-, erythro

Inchi: InChI=1S/C10H22/c1-7(2)9(5)10(6)8(3)4/h7-10H,1-6H3/t9-,10+
InchiKey: BHGNYYIOYPFWKC-AOOOYVTPSA-N
Formula: C10H22
SMILES: CC(C)C(C)C(C)C(C)C
Mol. weight [g/mol]: 142.28

Physical Properties

Property code	Value	Unit	Source
gf	23.56	kJ/mol	Joback Method
hf	-270.85	kJ/mol	Joback Method
hfus	7.56	kJ/mol	Joback Method
hvap	36.30	kJ/mol	Joback Method
log10ws	-3.04		Crippen Method
logp	3.571		Crippen Method
mcvol	151.760	ml/mol	McGowan Method
pc	2171.40	kPa	Joback Method
rinpol	916.00		NIST Webbook
tb	426.44	K	Joback Method
tc	603.70	K	Joback Method
tf	142.46	K	Joback Method
vc	0.572	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.20	J/mol×K	426.44	Joback Method
cpg	332.01	J/mol×K	455.98	Joback Method
cpg	348.14	J/mol×K	485.53	Joback Method
cpg	363.61	J/mol×K	515.07	Joback Method
cpg	378.44	J/mol×K	544.61	Joback Method
cpg	392.64	J/mol×K	574.15	Joback Method
cpg	406.22	J/mol×K	603.70	Joback Method
dvisc	0.1409238	Pa×s	142.46	Joback Method
dvisc	0.0120813	Pa×s	189.79	Joback Method

dvisc	0.0027615	Pa×s	237.12	Joback Method
dvisc	0.0010315	Pa×s	284.45	Joback Method
dvisc	0.0005103	Pa×s	331.78	Joback Method
dvisc	0.0003010	Pa×s	379.11	Joback Method
dvisc	0.0001996	Pa×s	426.44	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=R295497&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