Heptane, 2,2,3,5-tetramethyl-

Inchi: InChI=1S/C11H24/c1-7-9(2)8-10(3)11(4,5)6/h9-10H,7-8H2,1-6H3
InchiKey: KXNFNEAZTWCHIL-UHFFFAOYSA-N
Formula: C11H24
SMILES: CCC(C)CC(C)C(C)(C)C
Mol. weight [g/mol]: 156.31
CAS: 61868-42-6

Physical Properties

Property code	Value	Unit	Source
gf	39.70	kJ/mol	Joback Method
hf	-289.68	kJ/mol	Joback Method
hfus	9.79	kJ/mol	Joback Method
hvap	38.01	kJ/mol	Joback Method
log10ws	-3.70		Crippen Method
logp	4.105		Crippen Method
mcvol	165.850	ml/mol	McGowan Method
pc	1994.77	kPa	Joback Method
tb	446.97	K	Joback Method
tc	625.99	K	Joback Method
tf	186.15	K	Joback Method
vc	0.628	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	362.01	J/mol×K	446.97	Joback Method
cpg	380.31	J/mol×K	476.81	Joback Method
cpg	397.75	J/mol×K	506.64	Joback Method
cpg	414.36	J/mol×K	536.48	Joback Method
cpg	430.18	J/mol×K	566.32	Joback Method
cpg	445.24	J/mol×K	596.15	Joback Method
cpg	459.56	J/mol×K	625.99	Joback Method
dvisc	0.0387426	Pa×s	186.15	Joback Method
dvisc	0.0071443	Pa×s	229.62	Joback Method

dvisc	0.0022567	Pa×s	273.09	Joback Method
dvisc	0.0009782	Pa×s	316.56	Joback Method
dvisc	0.0005189	Pa×s	360.03	Joback Method
dvisc	0.0003155	Pa×s	403.50	Joback Method
dvisc	0.0002114	Pa×s	446.97	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=C61868426&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