Cyclohexene, 3-methyl-6-(1-methylethyl)-, trans-

Other names:	p-Menth-2-ene, trans-
	trans-p-Menth-2-ene
	trans-3-Isopropyl-6-methylcyclohexene
	2-p-Menthene (trans)
	3-Isopropyl-6-methyl-1-cyclohexene, (E)-
	2-Menthene, trans
Inchi:	InChI=1S/C10H18/c1-8(2)10-6-4-9(3)5-7-10/h4,6,8-10H,5,7H2,1-3H3/t9-,10-/m1/s1
InchiKey:	WHNGPXQYYRWQAS-NXEZZACHSA-N
Formula:	C10H18
SMILES:	CC1C=CC(C(C)C)CC1
Mol. weight [g/mol]:	138.25
CAS:	1124-26-1

Physical Properties

Property code	Value	Unit	Source
gf	77.58	kJ/mol	Joback Method
hf	-163.25	kJ/mol	Joback Method
hfus	12.26	kJ/mol	Joback Method
hvap	37.88	kJ/mol	Joback Method
log10ws	-3.03		Crippen Method
logp	3.245		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2597.78	kPa	Joback Method
rinpol	975.00		NIST Webbook
rinpol	976.30		NIST Webbook
rinpol	981.00		NIST Webbook
ripol	1071.00		NIST Webbook
tb	441.80	K	Joback Method
tc	644.93	K	Joback Method
tf	191.36	K	Joback Method
vc	0.507	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	285.08	J/mol×K	441.80	Joback Method
cpg	371.86	J/mol×K	611.07	Joback Method
cpg	356.27	J/mol×K	577.22	Joback Method
cpg	339.82	J/mol×K	543.36	Joback Method
cpg	322.48	J/mol×K	509.51	Joback Method
cpg	304.25	J/mol×K	475.65	Joback Method
cpg	386.61	J/mol×K	644.93	Joback Method
dvisc	0.0002442	Pa×s	441.80	Joback Method
dvisc	0.0003145	Pa×s	400.06	Joback Method
dvisc	0.0004295	Pa×s	358.32	Joback Method
dvisc	0.0006369	Pa×s	316.58	Joback Method
dvisc	0.0010645	Pa×s	274.84	Joback Method
dvisc	0.0021384	Pa×s	233.10	Joback Method
dvisc	0.0058238	Pa×s	191.36	Joback Method

Sources

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=C1124261&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
ripol: Polar retention indices

tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume