1(7)-P-menthene

Other names:	1-isopropyl-4-methylenecyclohexane
	Cyclohexane, 1-(1-methylethyl)-4-methylene
Inchi:	InChI=1S/C10H18/c1-8(2)10-6-4-9(3)5-7-10/h8,10H,3-7H2,1-2H3
InchiKey:	CEWQMRMCIKPUIK-UHFFFAOYSA-N
Formula:	C10H18
SMILES:	C=C1CCC(C(C)C)CC1
Mol. weight [g/mol]:	138.25
CAS:	1124-24-9

Physical Properties

Property code	Value	Unit	Source
gf	108.41	kJ/mol	Joback Method
hf	-116.45	kJ/mol	Joback Method
hfus	8.81	kJ/mol	Joback Method
hvap	38.05	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	3.389		Crippen Method
mcvol	136.600	ml/mol	McGowan Method
pc	2640.67	kPa	Joback Method
rinpol	985.50		NIST Webbook
rinpol	993.30		NIST Webbook
rinpol	1031.00		NIST Webbook
rinpol	1034.00		NIST Webbook
tb	446.47	K	Joback Method
tc	649.76	K	Joback Method
tf	208.52	K	Joback Method
vc	0.506	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	285.10	J/mol×K	446.47	Joback Method
cpg	303.62	J/mol×K	480.35	Joback Method
cpg	321.24	J/mol×K	514.23	Joback Method

cpg	338.01	J/mol×K	548.11	Joback Method
cpg	353.93	J/mol×K	581.99	Joback Method
cpg	369.02	J/mol×K	615.88	Joback Method
cpg	383.31	J/mol×K	649.76	Joback Method
dvisc	0.0064665	Pa×s	208.52	Joback Method
dvisc	0.0024589	Pa×s	248.18	Joback Method
dvisc	0.0012205	Pa×s	287.84	Joback Method
dvisc	0.0007178	Pa×s	327.50	Joback Method
dvisc	0.0004735	Pa×s	367.15	Joback Method
dvisc	0.0003387	Pa×s	406.81	Joback Method
dvisc	0.0002571	Pa×s	446.47	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=C1124249&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume