Cyclohexanol, 1-methyl-4-(1-methylethylidene)-

Other names: «gamma»-Terpineol
1-methyl-4-(1-methylethylidene)cyclohexan-1-ol
Inchi: InChI=1S/C10H18O/c1-8(2)9-4-6-10(3,11)7-5-9/h11H,4-7H2,1-3H3
InchiKey: NNRLDGQZIVUQTE-UHFFFAOYSA-N
Formula: C10H18O
SMILES: CC(C)=C1CCC(C)(O)CC1
Mol. weight [g/mol]: 154.25
CAS: 586-81-2

Physical Properties

Property code	Value	Unit	Source
gf	-47.63	kJ/mol	Joback Method
hf	-266.16	kJ/mol	Joback Method
hfus	10.29	kJ/mol	Joback Method
hvap	54.68	kJ/mol	Joback Method
log10ws	-3.13		Crippen Method
logp	2.648		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	3079.57	kPa	Joback Method
rinpol	1178.00		NIST Webbook
rinpol	1177.00		NIST Webbook
rinpol	1217.60		NIST Webbook
rinpol	1199.00		NIST Webbook
rinpol	1199.00		NIST Webbook
rinpol	1198.00		NIST Webbook
rinpol	1195.00		NIST Webbook
rinpol	1203.00		NIST Webbook
rinpol	1207.00		NIST Webbook
rinpol	1159.00		NIST Webbook
rinpol	1205.00		NIST Webbook
rinpol	1199.00		NIST Webbook
rinpol	1170.00		NIST Webbook
rinpol	1188.00		NIST Webbook
rinpol	1188.00		NIST Webbook
rinpol	1188.00		NIST Webbook
rinpol	1189.00		NIST Webbook
rinpol	1169.00		NIST Webbook

rinpol	1169.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1201.00		NIST Webbook
rinpol	1196.00		NIST Webbook
rinpol	1199.00		NIST Webbook
rinpol	1197.00		NIST Webbook
rinpol	1183.00		NIST Webbook
rinpol	1174.00		NIST Webbook
rinpol	1178.00		NIST Webbook
rinpol	1177.00		NIST Webbook
rinpol	1180.00		NIST Webbook
rinpol	1174.00		NIST Webbook
rinpol	1146.00		NIST Webbook
rinpol	1160.00		NIST Webbook
rinpol	1183.00		NIST Webbook
rinpol	1201.00		NIST Webbook
rinpol	1174.00		NIST Webbook
rinpol	1146.00		NIST Webbook
rinpol	1195.00		NIST Webbook
rinpol	1178.00		NIST Webbook
rinpol	1187.00		NIST Webbook
rinpol	1181.00		NIST Webbook
rinpol	1185.40		NIST Webbook
rinpol	1185.00		NIST Webbook
rinpol	1217.60		NIST Webbook
rinpol	1161.00		NIST Webbook
rinpol	1192.00		NIST Webbook
ripol	1655.00		NIST Webbook
ripol	1683.00		NIST Webbook
ripol	1684.00		NIST Webbook
ripol	1695.00		NIST Webbook
ripol	1683.00		NIST Webbook
ripol	1696.00		NIST Webbook
ripol	1683.00		NIST Webbook
tb	546.69	K	Joback Method
tc	749.66	K	Joback Method
tf	290.96	K	Joback Method
vc	0.529	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	349.56	J/mol×K	546.69	Joback Method
cpg	364.87	J/mol×K	580.52	Joback Method
cpg	379.30	J/mol×K	614.35	Joback Method
cpg	392.93	J/mol×K	648.18	Joback Method
cpg	405.87	J/mol×K	682.00	Joback Method
cpg	418.21	J/mol×K	715.83	Joback Method
cpg	430.06	J/mol×K	749.66	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=C586812&Units=SI

Legend

cpg:	Ideal gas heat capacity
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

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