L-«alpha»-Terpineol

Other names:	3-Cyclohexene-1-methanol, «alpha»,«alpha»,4-trimethyl-, (S)- p-Menth-1-en-8-ol, (S)-(-)- «alpha»-Terpineol, (-)- (-)-«alpha»-Terpineol 2-(4-Methyl-3-cyclohexen-1-yl)-2-propanol, (S)- 3-Cyclohexene-1-methanol, «alpha»,«alpha»,4-trimethyl-, (1S)- Alpha terpineol «alpha»-Terpieol p-menth-1-en-8-ol «alpha»-terpineol
Inchi:	InChI=1S/C10H18O/c1-8-4-6-9(7-5-8)10(2,3)11/h4,9,11H,5-7H2,1-3H3/t9-/m0/s1
InchiKey:	WUOACPNHFRMFPN-VIFPVBQESA-N
Formula:	C10H18O
SMILES:	CC1=CCC(C(C)(C)O)CC1
Mol. weight [g/mol]:	154.25
CAS:	10482-56-1

Physical Properties

Property code	Value	Unit	Source
gf	-55.88	kJ/mol	Joback Method
hf	-310.08	kJ/mol	Joback Method
hfus	11.00	kJ/mol	Joback Method
hvap	54.62	kJ/mol	Joback Method
log10ws	-2.89		Crippen Method
logp	2.504		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	2950.48	kPa	Joback Method
rinpol	1192.00		NIST Webbook
rinpol	1172.00		NIST Webbook
rinpol	1172.00		NIST Webbook
rinpol	1187.00		NIST Webbook
ripol	1690.00		NIST Webbook
ripol	1690.00		NIST Webbook
tb	540.84	K	Joback Method
tc	740.92	K	Joback Method
tf	308.00 ± 4.00	K	NIST Webbook
vc	0.522	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	436.42	J/mol×K	740.92	Joback Method
cpg	424.66	J/mol×K	707.57	Joback Method
cpg	412.12	J/mol×K	674.23	Joback Method
cpg	398.78	J/mol×K	640.88	Joback Method
cpg	384.60	J/mol×K	607.53	Joback Method
cpg	369.52	J/mol×K	574.19	Joback Method
cpg	353.52	J/mol×K	540.84	Joback Method
dvisc	0.0209502	Pa×s	286.36	Joback Method
dvisc	0.0001110	Pa×s	540.84	Joback Method
dvisc	0.0001833	Pa×s	498.43	Joback Method
dvisc	0.0003324	Pa×s	456.01	Joback Method
dvisc	0.0006809	Pa×s	413.60	Joback Method
dvisc	0.0016435	Pa×s	371.19	Joback Method
dvisc	0.0049794	Pa×s	328.77	Joback Method
hsubt	80.30	kJ/mol	305.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C10482561&Units=SI

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

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

hsubt:	Enthalpy of sublimation at a given temperature
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