trans-«beta»-Terpineol

Inchi: InChI=1S/C10H18O/c1-8(2)9-4-6-10(3,11)7-5-9/h9,11H,1,4-7H2,2-3H3/t9-,10-
InchiKey: RUJPNZNXGCHGID-MGCOHNPYSA-N
Formula: C10H18O
SMILES: C=C(C)C1CCC(C)(O)CC1
Mol. weight [g/mol]: 154.25

Physical Properties

Property code	Value	Unit	Source
gf	-12.96	kJ/mol	Joback Method
hf	-237.10	kJ/mol	Joback Method
hfus	9.76	kJ/mol	Joback Method
hvap	52.91	kJ/mol	Joback Method
log10ws	-2.89		Crippen Method
logp	2.504		Crippen Method
mcvol	142.470	ml/mol	McGowan Method
pc	3012.33	kPa	Joback Method
ripol	1570.00		NIST Webbook
ripol	1570.00		NIST Webbook
tb	532.06	K	Joback Method
tc	732.54	K	Joback Method
tf	274.60	K	Joback Method
vc	0.526	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	349.49	J/mol×K	532.06	Joback Method
cpg	365.75	J/mol×K	565.47	Joback Method
cpg	381.06	J/mol×K	598.89	Joback Method
cpg	395.50	J/mol×K	632.30	Joback Method
cpg	409.18	J/mol×K	665.71	Joback Method
cpg	422.18	J/mol×K	699.12	Joback Method
cpg	434.60	J/mol×K	732.54	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R603724&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

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