«alpha»-curcumene dihydro(+)

Inchi: InChI=1S/C15H26/c1-12(2)6-5-7-14(4)15-10-8-13(3)9-11-15/h8-10,12,14-15H,5-7,11H2,1
InchiKey: XIFQPGDVDRIQNE-UHFFFAOYSA-N
Formula: C15H26
SMILES: CC1=CCC(C(C)CCCC(C)C)C=C1
Mol. weight [g/mol]: 206.37

Physical Properties

Property code	Value	Unit	Source
gf	145.28	kJ/mol	Joback Method
hf	-205.08	kJ/mol	Joback Method
hfus	21.45	kJ/mol	Joback Method
hvap	49.88	kJ/mol	Joback Method
log10ws	-4.98		Crippen Method
logp	4.971		Crippen Method
mcvol	202.750	ml/mol	McGowan Method
pc	1765.41	kPa	Joback Method
rinpol	1445.00		NIST Webbook
tb	564.57	K	Joback Method
tc	762.00	K	Joback Method
tf	250.23	K	Joback Method
vc	0.768	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	513.42	J/mol×K	564.57	Joback Method
cpg	534.41	J/mol×K	597.47	Joback Method
cpg	554.32	J/mol×K	630.38	Joback Method
cpg	573.18	J/mol×K	663.28	Joback Method
cpg	591.02	J/mol×K	696.19	Joback Method
cpg	607.88	J/mol×K	729.09	Joback Method
cpg	623.79	J/mol×K	762.00	Joback Method
dvisc	0.0067473	Pa×s	250.23	Joback Method
dvisc	0.0021104	Pa×s	302.62	Joback Method

dvisc	0.0009302	Pa×s	355.01	Joback Method
dvisc	0.0005062	Pa×s	407.40	Joback Method
dvisc	0.0003164	Pa×s	459.79	Joback Method
dvisc	0.0002177	Pa×s	512.18	Joback Method
dvisc	0.0001606	Pa×s	564.57	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=R519936&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