

Stiripentol

Other names:

1-Penten-3-ol, 1-(1,3-benzodioxol-5-yl)-4,4-dimethyl-
1-Penten-3-ol, 4,4-dimethyl-1-(3,4-methylenedioxyphenyl)-
BCX 2600

4,4-Dimethyl-1-(3,4-methylenedioxyphenyl)-1-penten-3-ol

E(+) 4,4-dimethyl-1-(3,4-methylenedioxyphenyl)-1-penten-3-ol (stiripentol)

Inchi:

InChI=1S/C14H18O3/c1-14(2,3)13(15)7-5-10-4-6-11-12(8-10)17-9-16-11/h4-8,13,15H,9H

InchiKey:

IBLNKMRFIPWSOY-FNORWQNLSA-N

Formula:

C14H18O3

SMILES:

CC(C)(C)C(O)C=Cc1ccc2c(c1)OCO2

Mol. weight [g/mol]:

234.29

CAS:

49763-96-4

Physical Properties

Property code	Value	Unit	Source
gf	0.17	kJ/mol	Joback Method
hf	-338.60	kJ/mol	Joback Method
hfus	31.65	kJ/mol	Joback Method
hvap	74.55	kJ/mol	Joback Method
log10ws	-3.73		Crippen Method
logp	2.836		Crippen Method
mcvol	186.810	ml/mol	McGowan Method
pc	2643.39	kPa	Joback Method
tb	714.34	K	Joback Method
tc	929.69	K	Joback Method
tf	417.48	K	Joback Method
vc	0.694	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	600.59	J/molxK	929.69	Joback Method
cpg	590.60	J/molxK	893.80	Joback Method
cpg	580.14	J/molxK	857.91	Joback Method
cpg	569.11	J/molxK	822.02	Joback Method

cpg	557.42	J/mol×K	786.12	Joback Method
cpg	544.95	J/mol×K	750.23	Joback Method
cpg	531.61	J/mol×K	714.34	Joback Method
dvisc	0.0022109	Paxs	417.48	Joback Method
dvisc	0.0000545	Paxs	714.34	Joback Method
dvisc	0.0000803	Paxs	664.86	Joback Method
dvisc	0.0001260	Paxs	615.39	Joback Method
dvisc	0.0002137	Paxs	565.91	Joback Method
dvisc	0.0004011	Paxs	516.43	Joback Method
dvisc	0.0008602	Paxs	466.96	Joback Method
hfust	29.00	kJ/mol	348.20	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C49763964&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
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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