

(Z)-Cinnamyl alcohol

Inchi:	InChI=1S/C9H10O/c10-8-4-7-9-5-2-1-3-6-9/h1-7,10H,8H2/b7-4-
InchiKey:	OCCDEMITAIZTP-DAXSKMNVSA-N
Formula:	C9H10O
SMILES:	OCC=Cc1ccccc1
Mol. weight [g/mol]:	134.18
CAS:	4510-34-3

Physical Properties

Property code	Value	Unit	Source
gf	80.71	kJ/mol	Joback Method
hf	-27.57	kJ/mol	Joback Method
hfus	17.40	kJ/mol	Joback Method
hvap	54.54	kJ/mol	Joback Method
log10ws	-1.98		Crippen Method
logp	1.692		Crippen Method
mcvol	115.480	ml/mol	McGowan Method
pc	3872.29	kPa	Joback Method
rinpol	1265.00		NIST Webbook
rinpol	1259.00		NIST Webbook
rinpol	1259.00		NIST Webbook
rinpol	1265.00		NIST Webbook
ripol	2175.00		NIST Webbook
ripol	2175.00		NIST Webbook
tb	528.34	K	Joback Method
tc	732.08	K	Joback Method
tf	273.35	K	Joback Method
vc	0.430	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	248.22	J/mol×K	528.34	Joback Method
cpg	259.32	J/mol×K	562.30	Joback Method
cpg	269.69	J/mol×K	596.25	Joback Method

cpg	279.40	J/molxK	630.21	Joback Method
cpg	288.47	J/molxK	664.17	Joback Method
cpg	296.96	J/molxK	698.12	Joback Method
cpg	304.90	J/molxK	732.08	Joback Method
dvisc	0.0169277	Paxs	273.35	Joback Method
dvisc	0.0040869	Paxs	315.85	Joback Method
dvisc	0.0013823	Paxs	358.35	Joback Method
dvisc	0.0005883	Paxs	400.85	Joback Method
dvisc	0.0002950	Paxs	443.34	Joback Method
dvisc	0.0001669	Paxs	485.84	Joback Method
dvisc	0.0001035	Paxs	528.34	Joback Method

Sources

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=C4510343&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

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