2-Propen-1-ol, 3-phenyl-

Other names:	Cinnamyl alcohol
	«gamma»-Phenylallyl alcohol
	Cinnamic alcohol
	Phenyl-2-propen-1-ol
	Styrone
	Styryl carbinol
	3-Phenylallyl alcohol
	1-Phenyl-1-propen-3-ol
	3-Phenyl-2-propen-1-ol
	3-Phenyl-2-propenol
	Alkohol skoricovy
	3-Fenyl-2-propen-1-ol
	Phenylallyl alcohol
	3-phenylprop-2-en-1-ol
	1-Phenylprop-1-en-3-ol
	NSC 8775
	Styryl alcohol
Inchi:	InChI=1S/C9H10O/c10-8-4-7-9-5-2-1-3-6-9/h1-7,10H,8H2
InchiKey:	OOCCDEMITAIZTP-UHFFFAOYSA-N
Formula:	C9H10O
SMILES:	OCC=Cc1ccccc1
Mol. weight [g/mol]:	134.18
CAS:	104-54-1

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
ie	8.10 ± 0.20	eV	NIST Webbook
log10ws	-1.98		Crippen Method
logp	1.692		Crippen Method
mcvol	115.480	ml/mol	McGowan Method
pc	3872.29	kPa	Joback Method
rinpol	1329.00		NIST Webbook
rinpol	1300.00		NIST Webbook

rinpol	1312.00	NIST Webbook
rinpol	1312.00	NIST Webbook
rinpol	1277.00	NIST Webbook
rinpol	1304.00	NIST Webbook
rinpol	1268.20	NIST Webbook
rinpol	1269.90	NIST Webbook
rinpol	1269.90	NIST Webbook
rinpol	1270.10	NIST Webbook
rinpol	1265.00	NIST Webbook
rinpol	1295.00	NIST Webbook
rinpol	1309.00	NIST Webbook
rinpol	1330.00	NIST Webbook
rinpol	1327.00	NIST Webbook
rinpol	1327.00	NIST Webbook
rinpol	1271.80	NIST Webbook
rinpol	1342.00	NIST Webbook
rinpol	1331.00	NIST Webbook
rinpol	1314.00	NIST Webbook
rinpol	1309.00	NIST Webbook
rinpol	1306.00	NIST Webbook
rinpol	1268.00	NIST Webbook
rinpol	1280.00	NIST Webbook
rinpol	1300.00	NIST Webbook
rinpol	1280.00	NIST Webbook
rinpol	1306.00	NIST Webbook
rinpol	1265.00	NIST Webbook
rinpol	1312.00	NIST Webbook
rinpol	1300.00	NIST Webbook
rinpol	1275.00	NIST Webbook
rinpol	1268.00	NIST Webbook
rinpol	1300.00	NIST Webbook
rinpol	1309.00	NIST Webbook
rinpol	1272.00	NIST Webbook
rinpol	1272.00	NIST Webbook
rinpol	1269.90	NIST Webbook
rinpol	1330.00	NIST Webbook
rinpol	1331.00	NIST Webbook
rinpol	1280.00	NIST Webbook
rinpol	1300.00	NIST Webbook
rinpol	1312.00	NIST Webbook
rinpol	1304.00	NIST Webbook
ripol	2289.00	NIST Webbook
ripol	2294.00	NIST Webbook
ripol	2251.00	NIST Webbook

ripol	2252.00		NIST Webbook
ripol	2300.00		NIST Webbook
ripol	2286.00		NIST Webbook
ripol	2306.00		NIST Webbook
ripol	2300.00		NIST Webbook
ripol	2303.00		NIST Webbook
ripol	2294.00		NIST Webbook
ripol	2252.00		NIST Webbook
ripol	2266.00		NIST Webbook
ripol	2274.00		NIST Webbook
ripol	2252.00		NIST Webbook
ripol	2263.00		NIST Webbook
ripol	2251.00		NIST Webbook
ripol	2238.00		NIST Webbook
ripol	2299.00		NIST Webbook
ripol	2269.00		NIST Webbook
ripol	2264.00		NIST Webbook
ripol	2304.00		NIST Webbook
ripol	2302.00		NIST Webbook
ripol	2289.00		NIST Webbook
ripol	2299.00		NIST Webbook
ripol	2286.00		NIST Webbook
ripol	2307.00		NIST Webbook
ripol	2269.00		NIST Webbook
ripol	2294.00		NIST Webbook
ripol	2300.00		NIST Webbook
tb	530.65 ± 1.50	K	NIST Webbook
tb	523.20	K	NIST Webbook
tc	732.08	K	Joback Method
tf	307.85 ± 1.00	K	NIST Webbook
tf	308.00 ± 1.00	K	NIST Webbook
vc	0.430	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.69	J/mol×K	596.25	Joback Method
cpg	304.90	J/mol×K	732.08	Joback Method
cpg	296.96	J/mol×K	698.12	Joback Method
cpg	288.47	J/mol×K	664.17	Joback Method
cpg	279.40	J/mol×K	630.21	Joback Method

cpg	248.22	J/mol×K	528.34	Joback Method
cpg	259.32	J/mol×K	562.30	Joback Method
dvisc	0.0040869	Pa×s	315.85	Joback Method
dvisc	0.0013823	Pa×s	358.35	Joback Method
dvisc	0.0005883	Pa×s	400.85	Joback Method
dvisc	0.0002950	Pa×s	443.34	Joback Method
dvisc	0.0001669	Pa×s	485.84	Joback Method
dvisc	0.0169277	Pa×s	273.35	Joback Method
dvisc	0.0001035	Pa×s	528.34	Joback Method
hfust	15.73	kJ/mol	308.20	NIST Webbook
hfust	15.73	kJ/mol	308.20	NIST Webbook
hvapt	56.20	kJ/mol	448.00	NIST Webbook
hvapt	79.80	kJ/mol	319.00	NIST Webbook
hvapt	68.10 ± 0.10	kJ/mol	310.00	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C104541&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
hvapt: Enthalpy of vaporization at a given temperature
ie: Ionization energy
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