Ephedrine

Other names:

(-)-Ephedrine
L-Ephedrine
Efedrin
Ephedrin
Benzenemethanol, «alpha»-[1-(methylamino)ethyl]-, [R-(R*,S*)]-
«alpha»-Hydroxy-«beta»-methylamino propylbenzene
(-)-«alpha»-(1-Methylaminoethyl)benzyl alcohol
i-Sedrin
l-«alpha»-(1-Methylaminoethyl)benzyl alcohol
l-2-Methylamino-1-phenylpropanol
Ephedrine, l-(-)-
Ephedrital
Ephedrol
Ephedrosan
Ephedrotal
Ephedsol
Ephendronal
Ephoxamin
Fedrin
Kratedyn
Lexofedrin
Manadrin
Mandrin
Nasol
Norephedrine, N-methyl-
Sanedrine
Vencipon
Zephrol
1-Hydroxy-2-methylamino-1-phenylpropane, (1R,2S)-
1-Phenyl-2-methylaminopropanol, (1R,2S)-
Biophedrin
Eciphin
Ephedral
Ephedremal
1(R),2(S)-erythro-(-)-Ephedrine
(-)-(1R,2S)-Ephedrine
(-)-erythro-Ephedrine
Ephedrine l form
l-«alpha»-[1-(Methylamino)ethyl]benzenemethanol
l-Erythro-2-(methylamino)-1-phenylpropan-1-ol

	2-(Methylamino)-1-phenyl-1-propanol, (1R,2S)-
	Benzenemethanol, «alpha»-((1S)-1-(methylamino)ethyl)-, («alpha»R)-
	NSC 170951
	NSC 8971
Inchi:	InChI=1S/C10H15NO/c1-8(11-2)10(12)9-6-4-3-5-7-9/h3-8,10-12H,1-2H3/t8-,10-/m1/s1
InchiKey:	KWGRBVOPPLSCSI-PSASIEDQSA-N
Formula:	C10H15NO
SMILES:	CNC(C)C(O)c1ccccc1
Mol. weight [g/mol]:	165.23
CAS:	299-42-3

Physical Properties

Property code	Value	Unit	Source
gf	93.42	kJ/mol	Joback Method
hf	-122.52	kJ/mol	Joback Method
hfus	17.84	kJ/mol	Joback Method
hvap	62.47	kJ/mol	Joback Method
log10ws	-2.13		Crippen Method
logp	1.328		Crippen Method
mcvol	143.850	ml/mol	McGowan Method
pc	3356.75	kPa	Joback Method
rinpol	1363.00		NIST Webbook
rinpol	1370.00		NIST Webbook
rinpol	1350.00		NIST Webbook
rinpol	1370.00		NIST Webbook
rinpol	1363.00		NIST Webbook
rinpol	1348.00		NIST Webbook
rinpol	1358.00		NIST Webbook
rinpol	1366.00		NIST Webbook
rinpol	1356.00		NIST Webbook
rinpol	1388.00		NIST Webbook
rinpol	1337.00		NIST Webbook
rinpol	1381.00		NIST Webbook
rinpol	1337.00		NIST Webbook
rinpol	1350.00		NIST Webbook
rinpol	1360.00		NIST Webbook
rinpol	1365.00		NIST Webbook
rinpol	1350.00		NIST Webbook
rinpol	1376.00		NIST Webbook
rinpol	1330.00		NIST Webbook

rinpol	1350.00		NIST Webbook
rinpol	1350.00		NIST Webbook
rinpol	1336.00		NIST Webbook
rinpol	1370.00		NIST Webbook
rinpol	1365.00		NIST Webbook
rinpol	1350.00		NIST Webbook
rinpol	1356.00		NIST Webbook
rinpol	1358.00		NIST Webbook
rinpol	1361.00		NIST Webbook
rinpol	1363.00		NIST Webbook
rinpol	1368.00		NIST Webbook
rinpol	1370.00		NIST Webbook
rinpol	1398.00		NIST Webbook
rinpol	1400.00		NIST Webbook
rinpol	1403.00		NIST Webbook
rinpol	1363.00		NIST Webbook
rinpol	1363.00		NIST Webbook
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rinpol	1366.00		NIST Webbook
rinpol	1355.00		NIST Webbook
ripol	2089.00		NIST Webbook
ripol	2064.00		NIST Webbook
ripol	2085.00		NIST Webbook
ripol	2072.00		NIST Webbook
ripol	2082.00		NIST Webbook
ripol	2064.00		NIST Webbook
tb	498.20	K	NIST Webbook
tc	797.42	K	Joback Method

tf	312.36	K	Joback Method
vc	0.529	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	418.60	J/mol×K	763.91	Joback Method
cpg	361.03	J/mol×K	596.35	Joback Method
cpg	374.04	J/mol×K	629.86	Joback Method
cpg	386.27	J/mol×K	663.37	Joback Method
cpg	397.75	J/mol×K	696.89	Joback Method
cpg	408.51	J/mol×K	730.40	Joback Method
cpg	428.04	J/mol×K	797.42	Joback Method
hfust	17.33	kJ/mol	312.90	NIST Webbook

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=C299423&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
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

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