Tetrahydrozoline

Other names:	1H-Imidazole, 4,5-dihydro-2-(1,2,3,4-tetrahydro-1-naphthalenyl)-
	2-Imidazoline, 2-(1,2,3,4-tetrahydro-1-naphthyl)-
	Tetryzolin
	Tetryzoline
	Tyzanol
	2-(1,2,3,4-Tetrahydro-1-naphthyl)-2-imidazoline
	2-(1,2,3,4-Tetrahydro-1-naphthalenyl)-4,5-dihydro-1H-imidazole
Inchi:	InChI=1S/C13H16N2/c1-2-6-11-10(4-1)5-3-7-12(11)13-14-8-9-15-13/h1-2,4,6,12H,3,5,7-9
InchiKey:	BYJAVTDNIXVSPW-UHFFFAOYSA-N
Formula:	C13H16N2
SMILES:	c1ccc2c(c1)CCCC2C1=NCCN1
Mol. weight [g/mol]:	200.28
CAS:	84-22-0

Physical Properties

Property code	Value	Unit	Source
gf	479.09	kJ/mol	Joback Method
hf	215.96	kJ/mol	Joback Method
hfus	27.54	kJ/mol	Joback Method
hvap	62.04	kJ/mol	Joback Method
ie	8.33	eV	NIST Webbook
log10ws	-2.93		Crippen Method
logp	2.108		Crippen Method
mcvol	164.210	ml/mol	McGowan Method
pc	3322.01	kPa	Joback Method
rinpol	1833.00		NIST Webbook
rinpol	1833.00		NIST Webbook
tb	665.85	K	Joback Method
tc	934.64	K	Joback Method
tf	494.62	K	Joback Method
vc	0.619	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	463.76	J/mol×K	665.85	Joback Method
cpg	484.18	J/mol×K	710.65	Joback Method
cpg	502.86	J/mol×K	755.45	Joback Method
cpg	519.89	J/mol×K	800.25	Joback Method
cpg	535.37	J/mol×K	845.04	Joback Method
cpg	549.37	J/mol×K	889.84	Joback Method
cpg	561.99	J/mol×K	934.64	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=C84220&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
hvap: Enthalpy of vaporization at standard conditions
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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume