N-Ethyl-2-methylallylamine

Other names: 2-Propen-1-amine, N-ethyl-2-methyl-
N-Ethyl methallylamine
N-ethylmethacrylamine
Inchi: InChI=1S/C6H13N/c1-4-7-5-6(2)3/h7H,2,4-5H2,1,3H3
InchiKey: AXTLFVLHXSDZOW-UHFFFAOYSA-N
Formula: C6H13N
SMILES: C=C(C)CNCC
Mol. weight [g/mol]: 99.17
CAS: 18328-90-0

Physical Properties

Property code	Value	Unit	Source
gf	168.32	kJ/mol	Joback Method
hf	1.94	kJ/mol	Joback Method
hfus	13.80	kJ/mol	Joback Method
hvap	34.80	kJ/mol	Joback Method
log10ws	-1.38		Crippen Method
logp	1.172		Crippen Method
mcvol	101.080	ml/mol	McGowan Method
pc	3325.84	kPa	Joback Method
tb	378.00	K	NIST Webbook
tc	560.29	K	Joback Method
tf	194.32	K	Joback Method
vc	0.389	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	184.80	J/mol×K	383.41	Joback Method
cpg	195.80	J/mol×K	412.89	Joback Method
cpg	206.33	J/mol×K	442.37	Joback Method
cpg	216.42	J/mol×K	471.85	Joback Method
cpg	226.08	J/mol×K	501.33	Joback Method
cpg	235.31	J/mol×K	530.81	Joback Method

cpg	244.14	J/mol×K	560.29	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.53055e+01
Coeff. B	-3.54593e+03
Coeff. C	-4.62060e+01
Temperature range (K), min.	282.32
Temperature range (K), max.	401.01

Sources

The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18328900&Units=SI

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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature

tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume