3-Ethyl-piperidine

Inchi: InChI=1S/C7H15N/c1-2-7-4-3-5-8-6-7/h7-8H,2-6H2,1H3
InchiKey: YLUDSYGJHAQGOD-UHFFFAOYSA-N
Formula: C7H15N
SMILES: CCC1CCCNC1
Mol. weight [g/mol]: 113.20
CAS: 13603-10-6

Physical Properties

Property code	Value	Unit	Source
gf	120.22	kJ/mol	Joback Method
hf	-95.68	kJ/mol	Joback Method
hfus	15.31	kJ/mol	Joback Method
hvap	38.36	kJ/mol	Joback Method
log10ws	-1.59		Crippen Method
logp	1.396		Crippen Method
mcvol	108.610	ml/mol	McGowan Method
pc	3628.97	kPa	Joback Method
rinpol	930.00		NIST Webbook
tb	427.66	K	Joback Method
tc	639.14	K	Joback Method
tf	281.06	K	Joback Method
vc	0.398	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	215.15	J/mol×K	427.66	Joback Method
cpg	231.73	J/mol×K	462.91	Joback Method
cpg	247.54	J/mol×K	498.15	Joback Method
cpg	262.60	J/mol×K	533.40	Joback Method
cpg	276.91	J/mol×K	568.65	Joback Method
cpg	290.49	J/mol×K	603.89	Joback Method
cpg	303.36	J/mol×K	639.14	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=C13603106&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
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

Latest version available from:

https://www.chemeo.com/cid/67-993-6/3-Ethyl-piperidine.pdf

Generated by Cheméo on 2024-10-12 09:20:55.425332199 +0000 UTC m=+3305718.062301448.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.