

Mercaptamine

Other names:	2-Aminoethanethiol Cysteamine Ethanethiol, 2-amino- 2-Aminoethyl mercaptan Becaptan Cisteamina Cysteamin Cysteinamine Decarboxycysteine Lambraten MEA Mecramine Mercamine «beta»-Mercaptoethylamine (2-Mercaptoethyl)amine Thioethanolamine Lambratene Aminoethyl mercaptan «beta»-MEA «beta»-Aminoethanethiol Merkamin Riacon Mercaptamin Mercamin «beta»-Aminoethylthiol 2-Mercaptoethanamine 2-Amino-1-ethanethiol Ethanethiolamine L-1573 Cystagone MEA (mercaptan) Mercaptoethylamine NSC 647528 WR 347
Inchi:	InChI=1S/C2H7NS/c3-1-2-4/h4H,1-3H2
InchiKey:	UFULAYFCSOUIOV-UHFFFAOYSA-N
Formula:	C2H7NS
SMILES:	NCCS
Mol. weight [g/mol]:	77.15
CAS:	60-23-1

Physical Properties

Property code	Value	Unit	Source
gf	61.80	kJ/mol	Joback Method
hf	-12.34	kJ/mol	Joback Method
hfus	10.17	kJ/mol	Joback Method
hvap	37.42	kJ/mol	Joback Method
log10ws	-0.17		Crippen Method
logp	-0.125		Crippen Method
mcvol	65.370	ml/mol	McGowan Method
pc	6018.58	kPa	Joback Method
tb	380.55	K	Joback Method
tc	592.14	K	Joback Method
tf	232.02	K	Joback Method
vc	0.231	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	109.92	J/mol×K	380.55	Joback Method
cpg	116.15	J/mol×K	415.82	Joback Method
cpg	122.10	J/mol×K	451.08	Joback Method
cpg	127.78	J/mol×K	486.35	Joback Method
cpg	133.18	J/mol×K	521.61	Joback Method
cpg	138.33	J/mol×K	556.88	Joback Method
cpg	143.22	J/mol×K	592.14	Joback Method

Sources

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C60231&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
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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