Cyclobutanethiol

Inchi: InChI=1S/C4H8S/c5-4-2-1-3-4/h4-5H,1-3H2
InchiKey: WEMTXCOQGNENQZ-UHFFFAOYSA-N
Formula: C4H8S
SMILES: SC1CCC1
Mol. weight [g/mol]: 88.17
CAS: 6861-61-6

Physical Properties

Property code	Value	Unit	Source
gf	60.84	kJ/mol	Joback Method
hf	-20.77	kJ/mol	Joback Method
hfus	6.19	kJ/mol	Joback Method
hvap	31.32	kJ/mol	Joback Method
log10ws	-1.58		Crippen Method
logp	1.469		Crippen Method
mcvol	72.710	ml/mol	McGowan Method
pc	5228.24	kPa	Joback Method
tb	364.79	K	Joback Method
tc	583.05	K	Joback Method
tf	185.72	K	Joback Method
vc	0.263	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	113.80	J/mol×K	364.79	Joback Method
cpg	124.81	J/mol×K	401.17	Joback Method
cpg	135.15	J/mol×K	437.54	Joback Method
cpg	144.84	J/mol×K	473.92	Joback Method
cpg	153.91	J/mol×K	510.29	Joback Method
cpg	162.41	J/mol×K	546.67	Joback Method
cpg	170.36	J/mol×K	583.05	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=C6861616&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume