2,3-Diamino-2,3-Dimethylbutane

Other names: 2,3-Butanediamine, 2,3-dimethyl-
Inchi: InChI=1S/C6H16N2/c1-5(2,7)6(3,4)8/h7-8H2,1-4H3
InchiKey: CGCVLTOGUMLHNP-UHFFFAOYSA-N
Formula: C6H16N2
SMILES: CC(C)(N)C(C)(C)N
Mol. weight [g/mol]: 116.20
CAS: 20485-44-3

Physical Properties

Property code	Value	Unit	Source
gf	138.22	kJ/mol	Joback Method
hf	-117.09	kJ/mol	Joback Method
hfus	6.86	kJ/mol	Joback Method
hvap	47.64	kJ/mol	Joback Method
log10ws	-1.43		Crippen Method
logp	0.461		Crippen Method
mcvol	115.360	ml/mol	McGowan Method
pc	3708.97	kPa	Joback Method
tb	475.28	K	Joback Method
tc	694.61	K	Joback Method
tf	328.74	K	Joback Method
vc	0.407	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	271.33	J/mol×K	475.28	Joback Method
cpg	285.62	J/mol×K	511.84	Joback Method
cpg	298.88	J/mol×K	548.39	Joback Method
cpg	311.18	J/mol×K	584.95	Joback Method
cpg	322.57	J/mol×K	621.50	Joback Method
cpg	333.13	J/mol×K	658.06	Joback Method
cpg	342.93	J/mol×K	694.61	Joback Method

Sources

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=C20485443&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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