Cyclobutane, 1,3-dimethyl

Inchi: InChI=1S/C6H12/c1-5-3-6(2)4-5/h5-6H,3-4H2,1-2H3
InchiKey: WKHRDGKOKYBNDZ-UHFFFAOYSA-N
Formula: C6H12
SMILES: CC1CC(C)C1
Mol. weight [g/mol]: 84.16
CAS: 7411-24-7

Physical Properties

Property code	Value	Unit	Source
gf	40.58	kJ/mol	Joback Method
hf	-120.87	kJ/mol	Joback Method
hfus	8.40	kJ/mol	Joback Method
hvap	28.73	kJ/mol	Joback Method
log10ws	-1.75		Crippen Method
logp	2.052		Crippen Method
mcvol	84.540	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
tb	343.02	K	Joback Method
tc	528.71	K	Joback Method
tf	167.56	K	Joback Method
vc	0.320	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	138.78	J/mol×K	343.02	Joback Method
cpg	151.96	J/mol×K	373.97	Joback Method
cpg	164.56	J/mol×K	404.92	Joback Method
cpg	176.58	J/mol×K	435.86	Joback Method
cpg	188.05	J/mol×K	466.81	Joback Method
cpg	198.98	J/mol×K	497.76	Joback Method
cpg	209.40	J/mol×K	528.71	Joback Method
dvisc	0.0006361	Pa×s	167.56	Joback Method
dvisc	0.0004767	Pa×s	196.80	Joback Method

dvisc	0.0003849	Pa×s	226.05	Joback Method
dvisc	0.0003264	Pa×s	255.29	Joback Method
dvisc	0.0002864	Pa×s	284.53	Joback Method
dvisc	0.0002574	Pa×s	313.78	Joback Method
dvisc	0.0002357	Pa×s	343.02	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=C7411247&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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