

Cyclobutyl radical

Inchi: InChI=1S/C4H7/c1-2-4-3-1/h1H,2-4H2
InchiKey: ZAEBLFKQMDEPDM-UHFFFAOYSA-N
Formula: C4H7
SMILES: [CH]1CCC1
Mol. weight [g/mol]: 55.10
CAS: 4548-06-5

Physical Properties

Property code	Value	Unit	Source
gf	83.83	kJ/mol	Joback Method
hf	-3.44	kJ/mol	Joback Method
hfus	3.83	kJ/mol	Joback Method
hvap	24.44	kJ/mol	Joback Method
log10ws	-1.00		Crippen Method
logp	1.375		Crippen Method
mcvol	54.210	ml/mol	McGowan Method
pc	5080.25	kPa	Joback Method
tb	301.23	K	Joback Method
tc	483.56	K	Joback Method
tf	165.63	K	Joback Method
vc	0.200	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	66.40	J/mol×K	301.23	Joback Method
cpg	76.39	J/mol×K	331.62	Joback Method
cpg	85.71	J/mol×K	362.01	Joback Method
cpg	94.40	J/mol×K	392.40	Joback Method
cpg	102.50	J/mol×K	422.78	Joback Method
cpg	110.03	J/mol×K	453.17	Joback Method
cpg	117.04	J/mol×K	483.56	Joback Method
dvisc	0.0001576	Pa×s	165.63	Joback Method
dvisc	0.0001657	Pa×s	188.23	Joback Method

dvisc	0.0001724	Pa×s	210.83	Joback Method
dvisc	0.0001780	Pa×s	233.43	Joback Method
dvisc	0.0001828	Pa×s	256.03	Joback Method
dvisc	0.0001868	Pa×s	278.63	Joback Method
dvisc	0.0001904	Pa×s	301.23	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C4548065&Units=SI

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

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