Oxalacetic acid

Other names:	Oxaloacetic acid
	Butanedioic acid, oxo-
	Ketosuccinic acid
	Oxosuccinic acid
	OAA
	2-Ketosuccinic acid
	2-Oxosuccinic acid
	Butanedioic acid, 2-oxo-
	NSC 77688
Inchi:	InChI=1S/C4H4O5/c5-2(4(8)9)1-3(6)7/h1H2,(H,6,7)(H,8,9)
InchiKey:	KHPXUQMNIQBQEV-UHFFFAOYSA-N
Formula:	C4H4O5
SMILES:	O=C(O)CC(=O)C(=O)O
Mol. weight [g/mol]:	132.07
CAS:	328-42-7

Physical Properties

Property code	Value	Unit	Source
chs	-1205.58	kJ/mol	NIST Webbook
gf	-677.60	kJ/mol	Joback Method
hf	-768.09	kJ/mol	Joback Method
hfs	-943.21	kJ/mol	NIST Webbook
hfus	19.09	kJ/mol	Joback Method
hvap	78.09	kJ/mol	Joback Method
log10ws	1.02		Crippen Method
logp	-0.885		Crippen Method
mcvol	83.670	ml/mol	McGowan Method
pc	6620.58	kPa	Joback Method
tb	636.89	K	Joback Method
tc	820.48	K	Joback Method
tf	406.27	K	Joback Method
vc	0.316	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	193.10	J/mol×K	636.89	Joback Method
cpg	212.81	J/mol×K	789.88	Joback Method
cpg	209.38	J/mol×K	759.28	Joback Method
cpg	205.70	J/mol×K	728.68	Joback Method
cpg	201.76	J/mol×K	698.09	Joback Method
cpg	197.56	J/mol×K	667.49	Joback Method
cpg	216.01	J/mol×K	820.48	Joback Method
dvisc	0.0000435	Pa×s	636.89	Joback Method
dvisc	0.0000710	Pa×s	598.45	Joback Method
dvisc	0.0001241	Pa×s	560.02	Joback Method
dvisc	0.0002353	Pa×s	521.58	Joback Method
dvisc	0.0004942	Pa×s	483.14	Joback Method
dvisc	0.0011800	Pa×s	444.71	Joback Method
dvisc	0.0033217	Pa×s	406.27	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C328427&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

chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
dvisc: Dynamic viscosity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfs: Solid phase 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