1,4-Benzenedimethanol

Other names:	p-Xylene-«alpha»,«alpha»'-diol
	«alpha»,«alpha»'-p-Xylenediol
	p-(Hydroxymethyl)benzyl alcohol
	p-Benzenedimethanol
	p-Bis(hydroxymethyl)benzene
	p-Xylene glycol
	p-Xylylene glycol
	p-Xylylene-«alpha»,«alpha»'-diol
	p-Xylylenediol
	Terephthalyl alcohol
	1,4-Bis(hydroxymethyl)benzene
	1,4-Dimethylolbenzene
	1,4-Xylylene glycol
	«alpha»,«alpha»'-Dihydroxy-p-xylene
	NSC 5097
	p-phenylenedimethanol
Inchi:	InChI=1S/C8H10O2/c9-5-7-1-2-8(6-10)4-3-7/h1-4,9-10H,5-6H2
InchiKey:	BWVAOONFBYYRHY-UHFFFAOYSA-N
Formula:	C8H10O2
SMILES:	OCc1ccc(CO)cc1
Mol. weight [g/mol]:	138.16
CAS:	589-29-7

Physical Properties

Property code	Value	Unit	Source
chs	-4183.00 ± 2.00	kJ/mol	NIST Webbook
gf	-154.38	kJ/mol	Joback Method
hf	-287.85	kJ/mol	Joback Method
hfs	-394.00	kJ/mol	NIST Webbook
hfus	18.30	kJ/mol	Joback Method
hvap	69.70	kJ/mol	Joback Method
log10ws	-1.76		Crippen Method
logp	0.671		Crippen Method
mcvol	111.560	ml/mol	McGowan Method
pc	4528.58	kPa	Joback Method
tb	598.46	K	Joback Method
tc	785.86	K	Joback Method

tf	340.50	K	Joback Method
vc	0.413	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	267.61	J/mol×K	598.46	Joback Method
cpg	306.14	J/mol×K	754.63	Joback Method
cpg	299.29	J/mol×K	723.39	Joback Method
cpg	292.04	J/mol×K	692.16	Joback Method
cpg	284.35	J/mol×K	660.93	Joback Method
cpg	276.22	J/mol×K	629.69	Joback Method
cpg	312.59	J/mol×K	785.86	Joback Method
dvisc	0.0000345	Pa×s	598.46	Joback Method
dvisc	0.0000616	Pa×s	555.47	Joback Method
dvisc	0.0001212	Pa×s	512.47	Joback Method
dvisc	0.0002702	Pa×s	469.48	Joback Method
dvisc	0.0007079	Pa×s	426.49	Joback Method
dvisc	0.0023013	Pa×s	383.49	Joback Method
dvisc	0.0100764	Pa×s	340.50	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	413.70	K	0.10	NIST Webbook

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=C589297&Units=SI

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume