

4-Bromo-1,2-(methylenedioxy)benzene

Other names:	3,4-Methylenedioxybromobenzene 4-Bromomethylenedioxybenzene 5-bromobenzo-1,3-dioxole
Inchi:	InChI=1S/C7H5BrO2/c8-5-1-2-6-7(3-5)10-4-9-6/h1-3H,4H2
InchiKey:	FBOYMIDCHINJKC-UHFFFAOYSA-N
Formula:	C7H5BrO2
SMILES:	Brc1ccc2c(c1)OCO2
Mol. weight [g/mol]:	201.02
CAS:	2635-13-4

Physical Properties

Property code	Value	Unit	Source
gf	11.75	kJ/mol	Joback Method
hf	-118.75	kJ/mol	Joback Method
hfus	25.46	kJ/mol	Joback Method
hvap	50.45	kJ/mol	Joback Method
log10ws	-2.85		Crippen Method
logp	2.178		Crippen Method
mcvol	104.110	ml/mol	McGowan Method
pc	5289.26	kPa	Joback Method
tb	527.67	K	Joback Method
tc	777.88	K	Joback Method
tf	355.23	K	Joback Method
vc	0.382	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	205.53	J/molxK	527.67	Joback Method
cpg	214.91	J/molxK	569.37	Joback Method
cpg	223.43	J/molxK	611.07	Joback Method
cpg	231.19	J/molxK	652.77	Joback Method
cpg	238.26	J/molxK	694.47	Joback Method
cpg	244.73	J/molxK	736.17	Joback Method

cpg	250.68	J/molxK	777.88	Joback Method
dvisc	0.0021301	Paxs	355.23	Joback Method
dvisc	0.0015957	Paxs	383.97	Joback Method
dvisc	0.0012444	Paxs	412.71	Joback Method
dvisc	0.0010024	Paxs	441.45	Joback Method
dvisc	0.0008291	Paxs	470.19	Joback Method
dvisc	0.0007010	Paxs	498.93	Joback Method
dvisc	0.0006035	Paxs	527.67	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	358.70	K	0.10	NIST Webbook
tbrp	392.50 ± 0.50	K	2.70	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C2635134&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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