Benzene, (2-bromoethenyl)-

Other names:	Styrene, «beta»-bromo-
	«alpha»-Bromo-«beta»-phenylethylene
	«beta»-Bromostyrene
	«beta»-Bromstyrol
	«omega»-Bromostyrene
	(2-Bromoethenyl)benzene
	(2-Bromovinyl)benzene
	Hyacinth base
	Styryl bromide
	1-Bromo-2-phenylethene
	2-Bromostyrene
	1-Bromo-2-phenylethylene
	Bromostyrol
	Bromostyrolene
	Bromstyrole
	Bromstyrol
	beta-Bromostyrene
	NSC 8047
	Benzene, (2-bromoethenyl)- (e)
Inchi:	InChI=1S/C8H7Br/c9-7-6-8-4-2-1-3-5-8/h1-7H/b7-6+
InchiKey:	YMOONIIMQBGTDU-VOTSOKGWSA-N
Formula:	C8H7Br
SMILES:	BrC=Cc1ccccc1
Mol. weight [g/mol]:	183.04
CAS:	103-64-0

Physical Properties

Property code	Value	Unit	Source
gf	223.43	kJ/mol	Joback Method
hf	171.63	kJ/mol	Joback Method
hfus	16.00	kJ/mol	Joback Method
hvap	42.07	kJ/mol	Joback Method
log10ws	-3.22		Crippen Method
logp	3.052		Crippen Method
mcvol	113.020	ml/mol	McGowan Method
pc	4249.61	kPa	Joback Method
tb	479.44	K	Joback Method

tc	719.68	K	Joback Method
tf	261.06	K	Joback Method
vc	0.417	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	195.63	J/mol×K	479.44	Joback Method
cpg	244.59	J/mol×K	679.64	Joback Method
cpg	236.43	J/mol×K	639.60	Joback Method
cpg	227.53	J/mol×K	599.56	Joback Method
cpg	217.81	J/mol×K	559.52	Joback Method
cpg	207.20	J/mol×K	519.48	Joback Method
cpg	252.09	J/mol×K	719.68	Joback Method
dvisc	0.0002537	Pa×s	479.44	Joback Method
dvisc	0.0003201	Pa×s	443.04	Joback Method
dvisc	0.0004212	Pa×s	406.65	Joback Method
dvisc	0.0005849	Pa×s	370.25	Joback Method
dvisc	0.0008725	Pa×s	333.85	Joback Method
dvisc	0.0014354	Pa×s	297.46	Joback Method
dvisc	0.0027128	Pa×s	261.06	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	384.20	K	2.70	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=C103640&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume