Ethylene, 1,1-dibromo-

Other names:	1,1-dibromoethylene
	Ethene, 1,1-dibromo-
Inchi:	InChI=1S/C2H2Br2/c1-2(3)4/h1H2
InchiKey:	IWHJPYXAFGKABF-UHFFFAOYSA-N
Formula:	C2H2Br2
SMILES:	C=C(Br)Br
Mol. weight [g/mol]:	185.84
CAS:	593-92-0

Physical Properties

Property code	Value	Unit	Source
gf	73.89	kJ/mol	Joback Method
hf	83.69	kJ/mol	Joback Method
hfus	8.92	kJ/mol	Joback Method
hvap	32.33	kJ/mol	Joback Method
ie	9.78	eV	NIST Webbook
log10ws	-2.37		Crippen Method
logp	2.247		Crippen Method
mcvol	69.740	ml/mol	McGowan Method
pc	6663.89	kPa	Joback Method
tb	365.20	K	NIST Webbook
tc	594.28	K	Joback Method
tf	216.18	K	Joback Method
vc	0.254	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	78.15	J/mol×K	374.04	Joback Method
cpg	81.74	J/mol×K	410.75	Joback Method
cpg	84.98	J/mol×K	447.45	Joback Method
cpg	87.90	J/mol×K	484.16	Joback Method
cpg	90.53	J/mol×K	520.86	Joback Method
cpg	92.90	J/mol×K	557.57	Joback Method

cpg	95.04	J/mol×K	594.28	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=C593920&Units=SI

Legend

cpg:	Ideal gas heat capacity
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
ie:	Ionization energy
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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