2-Butene, 1,4-dibromo-, (E)-

Other names:	(2E)-1,4-Dibromo-2-butene
	(E)-1,4-Dibromo-2-butene
	(E)-1,4-dibromobut-2-ene
	1,4-Dibromo-2-butene, E-
	1,4-trans-Dibromobutene-2
	2-Butene, 1,4-dibromo-, (2E)-
	2-Butene, 1,4-dibromo-, trans-
	trans-1,4-Dibromo-2-butene
	trans-1,4-Dibromobut-2-ene
Inchi:	InChI=1S/C4H6Br2/c5-3-1-2-4-6/h1-2H,3-4H2/b2-1+
InchiKey:	RMXLHIUHKIVPAB-OWOJBTEDSA-N
Formula:	C4H6Br2
SMILES:	BrCC=CCBr
Mol. weight [g/mol]:	213.90
CAS:	821-06-7

Physical Properties

Property code	Value	Unit	Source
gf	91.66	kJ/mol	Joback Method
hf	43.99	kJ/mol	Joback Method
hfus	16.89	kJ/mol	Joback Method
hvap	37.33	kJ/mol	Joback Method
log10ws	-2.21		Crippen Method
logp	2.332		Crippen Method
mcvol	97.920	ml/mol	McGowan Method
pc	5015.69	kPa	Joback Method
tb	478.20	K	NIST Webbook
tc	644.74	K	Joback Method
tf	249.36	K	Joback Method
vc	0.363	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	141.76	J/mol×K	427.40	Joback Method
cpg	148.87	J/mol×K	463.62	Joback Method
cpg	155.43	J/mol×K	499.85	Joback Method
cpg	161.48	J/mol×K	536.07	Joback Method
cpg	167.07	J/mol×K	572.29	Joback Method
cpg	172.24	J/mol×K	608.51	Joback Method
cpg	177.04	J/mol×K	644.74	Joback Method
dvisc	0.0028790	Pa×s	249.36	Joback Method
dvisc	0.0017018	Pa×s	279.03	Joback Method
dvisc	0.0011129	Pa×s	308.71	Joback Method
dvisc	0.0007841	Pa×s	338.38	Joback Method
dvisc	0.0005845	Pa×s	368.05	Joback Method
dvisc	0.0004552	Pa×s	397.73	Joback Method
dvisc	0.0003671	Pa×s	427.40	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.45037e+01
Coeff. B	-4.00042e+03
Coeff. C	-7.35200e+01
Temperature range (K), min.	354.92
Temperature range (K), max.	508.72

Sources

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=C821067&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

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

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume