1,2-Dibromoethylene

Other names:	Ethene, 1,2-dibromo- Ethylene, 1,2-dibromo- s-Dibromoethylene Acetylene dibromide 1,2-Dibromoethene sym-Dibromoethylene 2-Bromovinyl bromide NSC 8744
Inchi:	InChI=1S/C2H2Br2/c3-1-2-4/h1-2H
InchiKey:	UWTUEMKLYAGTNQ-UHFFFAOYSA-N
Formula:	C2H2Br2
SMILES:	BrC=CBr
Mol. weight [g/mol]:	185.84
CAS:	540-49-8

Physical Properties

Property code	Value	Unit	Source
gf	74.82	kJ/mol	Joback Method
hf	85.27	kJ/mol	Joback Method
hfus	11.71	kJ/mol	Joback Method
hvap	32.87	kJ/mol	Joback Method
log10ws	-2.37		Crippen Method
logp	2.247		Crippen Method
mcvol	69.740	ml/mol	McGowan Method
pc	6718.62	kPa	Joback Method
tb	385.00 ± 2.00	K	NIST Webbook
tc	604.03	K	Joback Method
tf	283.00 ± 1.50	K	NIST Webbook
vc	0.252	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	75.76	J/mol×K	381.64	Joback Method

cpg	91.00	J/mol×K	566.97	Joback Method
cpg	88.63	J/mol×K	529.90	Joback Method
cpg	85.95	J/mol×K	492.84	Joback Method
cpg	82.94	J/mol×K	455.77	Joback Method
cpg	79.56	J/mol×K	418.71	Joback Method
cpg	93.12	J/mol×K	604.03	Joback Method
dvisc	0.0004097	Pa×s	381.64	Joback Method
dvisc	0.0004997	Pa×s	355.84	Joback Method
dvisc	0.0006286	Pa×s	330.03	Joback Method
dvisc	0.0008221	Pa×s	304.23	Joback Method
dvisc	0.0011301	Pa×s	278.43	Joback Method
dvisc	0.0016579	Pa×s	252.62	Joback Method
dvisc	0.0026536	Pa×s	226.82	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	383.20	K	101.00	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=C540498&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