Ethane, 1-bromo-2-fluoro-

Other names:	1-Bromo-2-fluoroethane
	1-Fluoro-2-bromoethane
	CH2FCH2Br
Inchi:	InChI=1S/C2H4BrF/c3-1-2-4/h1-2H2
InchiKey:	JTLAIKFGRHDNQM-UHFFFAOYSA-N
Formula:	C2H4BrF
SMILES:	FCCBr
Mol. weight [g/mol]:	126.96
CAS:	762-49-2

Physical Properties

Property code	Value	Unit	Source
gf	-214.53	kJ/mol	Joback Method
hf	-254.39	kJ/mol	Joback Method
hfus	9.30	kJ/mol	Joback Method
hvap	25.66	kJ/mol	Joback Method
ie	10.57	eV	NIST Webbook
log10ws	-0.94		Crippen Method
logp	1.351		Crippen Method
mcvol	58.310	ml/mol	McGowan Method
pc	5205.63	kPa	Joback Method
tb	344.50 ± 0.50	K	NIST Webbook
tb	345.00	K	NIST Webbook
tc	485.18	K	Joback Method
tf	172.69	K	Joback Method
vc	0.228	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	75.97	J/mol×K	310.59	Joback Method
cpg	80.28	J/mol×K	339.69	Joback Method
cpg	84.38	J/mol×K	368.79	Joback Method
cpg	88.29	J/mol×K	397.89	Joback Method

cpg	92.02	J/mol×K	426.98	Joback Method
cpg	95.56	J/mol×K	456.08	Joback Method
cpg	98.94	J/mol×K	485.18	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50012e+01
Coeff. B	-3.57845e+03
Temperature range (K), min.	243.21
Temperature range (K), max.	369.30

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C762492&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

Joback Method: https://en.wikipedia.org/wiki/Joback_method

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

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