Methane, bromofluoro-

Other names:	Bromofluoromethane
Inchi:	InChI=1S/CH2BrF/c2-1-3/h1H2
InchiKey:	LHMHCLYDBQOYTO-UHFFFAOYSA-N
Formula:	CH2BrF
SMILES:	FCBr
Mol. weight [g/mol]:	112.93
CAS:	373-52-4

Physical Properties

Property code	Value	Unit	Source
gf	-222.95	kJ/mol	Joback Method
hf	-233.75	kJ/mol	Joback Method
hfus	6.71	kJ/mol	Joback Method
hvap	23.44	kJ/mol	Joback Method
log10ws	-1.02		Crippen Method
logp	1.308		Crippen Method
mcvol	44.220	ml/mol	McGowan Method
pc	6009.25	kPa	Joback Method
tb	287.71	K	Joback Method
tc	461.14	K	Joback Method
tf	161.42	K	Joback Method
vc	0.172	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	50.23	J/mol×K	287.71	Joback Method
cpg	52.79	J/mol×K	316.62	Joback Method
cpg	55.21	J/mol×K	345.52	Joback Method
cpg	57.50	J/mol×K	374.43	Joback Method
cpg	59.67	J/mol×K	403.33	Joback Method
cpg	61.72	J/mol×K	432.24	Joback Method
cpg	63.66	J/mol×K	461.14	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=C373524&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
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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