1,4-dibromo-1,1,2,2-tetrafluorobutane

Inchi: InChI=1S/C4H4Br2F4/c5-2-1-3(7,8)4(6,9)10/h1-2H2
InchiKey: ASHCDEYFCNWSTR-UHFFFAOYSA-N
Formula: C4H4Br2F4
SMILES: FC(F)(Br)C(F)(F)CCBr
Mol. weight [g/mol]: 287.88
CAS: 18599-20-7

Physical Properties

Property code	Value	Unit	Source
gf	-762.12	kJ/mol	Joback Method
hf	-875.17	kJ/mol	Joback Method
hfus	14.18	kJ/mol	Joback Method
hvap	31.51	kJ/mol	Joback Method
log10ws	-3.48		Crippen Method
logp	3.394		Crippen Method
mcvol	109.300	ml/mol	McGowan Method
pc	3877.12	kPa	Joback Method
rinpol	823.90		NIST Webbook
tb	413.86	K	Joback Method
tc	602.42	K	Joback Method
tf	261.64	K	Joback Method
vc	0.433	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	196.63	J/mol×K	413.86	Joback Method
cpg	205.06	J/mol×K	445.29	Joback Method
cpg	212.73	J/mol×K	476.71	Joback Method
cpg	219.69	J/mol×K	508.14	Joback Method
cpg	226.00	J/mol×K	539.57	Joback Method
cpg	231.69	J/mol×K	571.00	Joback Method
cpg	236.83	J/mol×K	602.42	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18599207&Units=SI
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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume