Fluorobenzene, meta-(dibromomethyl)-

Other names:	3-Fluorobenzal bromide
	meta-(Dibromomethyl)fluorobenzene
	Benzene, 1-(dibromomethyl)-3-fluoro-
	3-bromobenzal bromide
Inchi:	InChI=1S/C7H5Br2F/c8-7(9)5-2-1-3-6(10)4-5/h1-4,7H
InchiKey:	ZIAHZFPHXNQNQN-UHFFFAOYSA-N
Formula:	C7H5Br2F
SMILES:	Fc1cccc(C(Br)Br)c1
Mol. weight [g/mol]:	267.92
CAS:	455-34-5

Physical Properties

Property code	Value	Unit	Source
gf	-57.77	kJ/mol	Joback Method
hf	-111.48	kJ/mol	Joback Method
hfus	17.67	kJ/mol	Joback Method
hvap	45.78	kJ/mol	Joback Method
log10ws	-4.00		Crippen Method
logp	3.614		Crippen Method
mcvol	122.500	ml/mol	McGowan Method
pc	4608.87	kPa	Joback Method
tb	522.37	K	Joback Method
tc	765.81	K	Joback Method
tf	312.78	K	Joback Method
vc	0.456	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	212.79	J/mol×K	522.37	Joback Method
cpg	222.07	J/mol×K	562.94	Joback Method
cpg	230.57	J/mol×K	603.52	Joback Method
cpg	238.35	J/mol×K	644.09	Joback Method
cpg	245.46	J/mol×K	684.66	Joback Method

cpg	251.97	J/mol×K	725.23	Joback Method
cpg	257.94	J/mol×K	765.81	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	382.20	K	1.00	NIST Webbook

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=C455345&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
tbrp: Boiling point at reduced pressure
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume