Benzene, 1-ethenyl-3-fluoro-

Other names:	m-Fluorostyrene
	3-Fluorostyrene
Inchi:	InChI=1S/C8H7F/c1-2-7-4-3-5-8(9)6-7/h2-6H,1H2
InchiKey:	ZJSKEGAHBAHFON-UHFFFAOYSA-N
Formula:	C8H7F
SMILES:	C=Cc1cccc(F)c1
Mol. weight [g/mol]:	122.14
CAS:	350-51-6

Physical Properties

Property code	Value	Unit	Source
gf	12.29	kJ/mol	Joback Method
hf	-54.07	kJ/mol	Joback Method
hfus	11.93	kJ/mol	Joback Method
hvap	34.85	kJ/mol	Joback Method
log10ws	-2.63		Crippen Method
logp	2.469		Crippen Method
mcvol	97.290	ml/mol	McGowan Method
pc	3572.80	kPa	Joback Method
tb	410.05	K	Joback Method
tc	613.88	K	Joback Method
tf	217.69	K	Joback Method
vc	0.374	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	169.86	J/mol×K	410.05	Joback Method
cpg	180.79	J/mol×K	444.02	Joback Method
cpg	191.09	J/mol×K	477.99	Joback Method
cpg	200.80	J/mol×K	511.96	Joback Method
cpg	209.92	J/mol×K	545.94	Joback Method
cpg	218.50	J/mol×K	579.91	Joback Method
cpg	226.55	J/mol×K	613.88	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	303.70	K	0.50	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=C350516&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