

Fc-c-344

Inchi:	InChI=1S/C4H3ClF4/c5-2-1-3(6,7)4(2,8)9/h2H,1H2
InchiKey:	JZTOHBFNNYFPIP-UHFFFAOYSA-N
Formula:	C4H3ClF4
SMILES:	FC1(F)CC(Cl)C1(F)F
Mol. weight [g/mol]:	162.51
CAS:	558-61-2

Physical Properties

Property code	Value	Unit	Source
gf	-786.12	kJ/mol	Joback Method
hf	-869.63	kJ/mol	Joback Method
hfus	8.21	kJ/mol	Joback Method
hvap	22.78	kJ/mol	Joback Method
log10ws	-2.28		Crippen Method
logp	2.268		Crippen Method
mcvol	75.680	ml/mol	McGowan Method
pc	3718.02	kPa	Joback Method
tb	347.00	K	NIST Webbook
tc	496.94	K	Joback Method
tf	220.86	K	Joback Method
vc	0.324	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	129.32	J/molxK	327.58	Joback Method
cpg	140.19	J/molxK	355.81	Joback Method
cpg	149.96	J/molxK	384.03	Joback Method
cpg	158.73	J/molxK	412.26	Joback Method
cpg	166.59	J/molxK	440.49	Joback Method
cpg	173.63	J/molxK	468.71	Joback Method
cpg	179.94	J/molxK	496.94	Joback Method

Sources

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=C558612&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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

Latest version available from:

<https://www.chemeo.com/cid/24-981-6/Fc-c-344.pdf>

Generated by Cheméo on 2024-04-29 12:44:56.392489446 +0000 UTC m=+16683945.313066767.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.