Propane, 1,1,2,2-tetrafluoro-

Inchi: InChI=1S/C3H4F4/c1-3(6,7)2(4)5/h2H,1H3
InchiKey: XWUSALIIUZARQE-UHFFFAOYSA-N
Formula: C3H4F4
SMILES: CC(F)(F)C(F)F
Mol. weight [g/mol]: 116.06
CAS: 40723-63-5

Physical Properties

Property code	Value	Unit	Source
gf	-804.46	kJ/mol	Joback Method
hf	-903.72	kJ/mol	Joback Method
hfus	4.91	kJ/mol	Joback Method
hvap	17.32	kJ/mol	Joback Method
log10ws	-1.71		Crippen Method
logp	1.907		Crippen Method
mcvol	60.210	ml/mol	McGowan Method
pc	3633.35	kPa	Joback Method
tb	272.37 ± 0.50	K	NIST Webbook
tc	398.50	K	Joback Method
tf	113.35	K	Joback Method
vc	0.259	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	96.79	J/mol×K	261.45	Joback Method
cpg	103.34	J/mol×K	284.29	Joback Method
cpg	109.60	J/mol×K	307.13	Joback Method
cpg	115.58	J/mol×K	329.97	Joback Method
cpg	121.28	J/mol×K	352.82	Joback Method
cpg	126.72	J/mol×K	375.66	Joback Method
cpg	131.90	J/mol×K	398.50	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=C40723635&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