Desflurane

Other names: 2-(Difluoromethoxy)-1,1,1,2-tetrafluoroethane
Inchi: InChI=1S/C3H2F6O/c4-1(3(7,8)9)10-2(5)6/h1-2H
InchiKey: DPYMFVXJLLWWEU-UHFFFAOYSA-N
Formula: C3H2F6O
SMILES: FC(F)OC(F)C(F)(F)F
Mol. weight [g/mol]: 168.04
CAS: 57041-67-5

Physical Properties

Property code	Value	Unit	Source
gf	-1301.52	kJ/mol	Joback Method
hf	-1433.44	kJ/mol	Joback Method
hfus	8.73	kJ/mol	Joback Method
hvap	17.71	kJ/mol	Joback Method
log10ws	-2.10		Crippen Method
logp	2.084		Crippen Method
mcvol	69.620	ml/mol	McGowan Method
pc	3235.66	kPa	Joback Method
tb	281.97	K	Joback Method
tc	410.14	K	Joback Method
tf	121.76	K	Joback Method
vc	0.306	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	134.16	J/mol×K	281.97	Joback Method
cpg	140.02	J/mol×K	303.33	Joback Method
cpg	145.67	J/mol×K	324.69	Joback Method
cpg	151.11	J/mol×K	346.06	Joback Method
cpg	156.34	J/mol×K	367.42	Joback Method
cpg	161.36	J/mol×K	388.78	Joback Method
cpg	166.18	J/mol×K	410.14	Joback Method

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=C57041675&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume