

Ethylene glycol, bis(chlorodifluoroacetate)

Inchi:	InChI=1S/C6H4Cl2F4O4/c7-5(9,10)3(13)15-1-2-16-4(14)6(8,11)12/h1-2H2
InchiKey:	NLNKBMVAQDRMSE-UHFFFAOYSA-N
Formula:	C6H4Cl2F4O4
SMILES:	O=C(OCCOC(=O)C(F)(F)Cl)C(F)(F)Cl
Mol. weight [g/mol]:	286.99

Physical Properties

Property code	Value	Unit	Source
gf	-1265.62	kJ/mol	Joback Method
hf	-1490.19	kJ/mol	Joback Method
hfus	22.76	kJ/mol	Joback Method
hvap	50.17	kJ/mol	Joback Method
log10ws	-1.98		Crippen Method
logp	1.736		Crippen Method
mcvol	141.840	ml/mol	McGowan Method
pc	2718.33	kPa	Joback Method
rinpol	1069.00		NIST Webbook
tb	554.74	K	Joback Method
tc	738.55	K	Joback Method
tf	368.74	K	Joback Method
vc	0.568	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	322.93	J/molxK	554.74	Joback Method
cpg	330.75	J/molxK	585.38	Joback Method
cpg	338.03	J/molxK	616.01	Joback Method
cpg	344.79	J/molxK	646.65	Joback Method
cpg	351.05	J/molxK	677.28	Joback Method
cpg	356.83	J/molxK	707.92	Joback Method
cpg	362.15	J/molxK	738.55	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=U375913&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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
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/24-785-4/Ethylene-glycol-bis-chlorodifluoroacetate.pdf>

Generated by Cheméo on 2024-04-20 01:58:22.121371759 +0000 UTC m=+15867551.041949071.

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