

# Oxirane, tetrafluoro-

<b>Other names:</b>	tetrafluorooxirane
<b>Inchi:</b>	InChI=1S/C2F4O/c3-1(4)2(5,6)7-1
<b>InchiKey:</b>	LOUICXNAWQPGSU-UHFFFAOYSA-N
<b>Formula:</b>	C2F4O
<b>SMILES:</b>	FC1(F)OC1(F)F
<b>Mol. weight [g/mol]:</b>	116.01
<b>CAS:</b>	694-17-7

## Physical Properties

Property code	Value	Unit	Source
gf	-857.34	kJ/mol	Joback Method
hf	-918.11	kJ/mol	Joback Method
hfus	7.84	kJ/mol	Joback Method
hvap	18.59	kJ/mol	Joback Method
log10ws	-1.26		Crippen Method
logp	1.202		Crippen Method
mcvol	41.130	ml/mol	McGowan Method
pc	5015.69	kPa	Joback Method
rinpol	254.00		NIST Webbook
tb	271.74	K	Joback Method
tc	424.27	K	Joback Method
tf	202.73	K	Joback Method
vc	0.193	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	68.58	J/molxK	271.74	Joback Method
cpg	77.15	J/molxK	297.16	Joback Method
cpg	84.76	J/molxK	322.58	Joback Method
cpg	91.46	J/molxK	348.00	Joback Method
cpg	97.33	J/molxK	373.43	Joback Method
cpg	102.44	J/molxK	398.85	Joback Method
cpg	106.86	J/molxK	424.27	Joback Method

# Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C694177&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C694177&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

# Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpola:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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