

# C2HF3OS

<b>Inchi:</b>	InChI=1S/C2HF3OS/c3-2(4,5)1(6)7/h(H,6,7)
<b>InchiKey:</b>	HLDPDUFAJCWOBX-UHFFFAOYSA-N
<b>Formula:</b>	C2HF3OS
<b>SMILES:</b>	OC(=S)C(F)(F)F
<b>Mol. weight [g/mol]:</b>	130.09
<b>CAS:</b>	2925-25-9

## Physical Properties

Property code	Value	Unit	Source
gf	-635.39	kJ/mol	Joback Method
hf	-687.42	kJ/mol	Joback Method
hfus	11.45	kJ/mol	Joback Method
hvap	39.71	kJ/mol	Joback Method
log10ws	-1.50		Crippen Method
logp	1.434		Crippen Method
mcvol	62.270	ml/mol	McGowan Method
pc	5552.58	kPa	Joback Method
tb	401.96	K	Joback Method
tc	575.94	K	Joback Method
tf	211.58	K	Joback Method
vc	0.245	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	117.72	J/mol×K	401.96	Joback Method
cpg	122.17	J/mol×K	430.96	Joback Method
cpg	126.17	J/mol×K	459.95	Joback Method
cpg	129.75	J/mol×K	488.95	Joback Method
cpg	132.95	J/mol×K	517.95	Joback Method
cpg	135.80	J/mol×K	546.94	Joback Method
cpg	138.32	J/mol×K	575.94	Joback Method

# Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307I">http://pubs.acs.org/doi/abs/10.1021/ci990307I</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<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=C2925259&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C2925259&amp;Units=SI</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>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<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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