

# 1,1,1,5,5,6,6,7,7,7-Decafluoro-2,4-heptanedione

<b>Inchi:</b>	InChI=1S/C7H2F10O2/c8-4(9,6(13,14)7(15,16)17)2(18)1-3(19)5(10,11)12/h1H2
<b>InchiKey:</b>	SUORUQZBFOQDGX-UHFFFAOYSA-N
<b>Formula:</b>	C7H2F10O2
<b>SMILES:</b>	O=C(CC(=O)C(F)(F)C(F)(F)C(F)(F)F)C(F)(F)F
<b>Mol. weight [g/mol]:</b>	308.07
<b>CAS:</b>	20583-66-8

## Physical Properties

Property code	Value	Unit	Source
gf	-2186.52	kJ/mol	Joback Method
hf	-2409.07	kJ/mol	Joback Method
hfus	18.23	kJ/mol	Joback Method
hvap	31.31	kJ/mol	Joback Method
log10ws	-3.27		Crippen Method
logp	2.910		Crippen Method
mcvol	130.330	ml/mol	McGowan Method
pc	2187.68	kPa	Joback Method
tb	447.08	K	Joback Method
tc	592.63	K	Joback Method
tf	284.09	K	Joback Method
vc	0.576	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	327.47	J/molxK	447.08	Joback Method
cpg	337.42	J/molxK	471.34	Joback Method
cpg	346.66	J/molxK	495.60	Joback Method
cpg	355.22	J/molxK	519.85	Joback Method
cpg	363.12	J/molxK	544.11	Joback Method
cpg	370.41	J/molxK	568.37	Joback Method
cpg	377.13	J/molxK	592.63	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C20583668&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C20583668&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>

# 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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