

# Glutaric acid, oct-1-en-3-yl 2,2,3,3,4,4,5,5-octafluoropentyl ester

Inchi: InChI=1S/C18H24F8O4/c1-3-5-6-8-12(4-2)30-14(28)10-7-9-13(27)29-11-16(21,22)18(25)

InchiKey: MCCVSESGNIDAFN-UHFFFAOYSA-N

Formula: C18H24F8O4

SMILES: C=CC(CCCCC)OC(=O)CCCC(=O)OCC(F)(F)C(F)(F)C(F)(F)C(F)F

Mol. weight [g/mol]: 456.37

## Physical Properties

Property code	Value	Unit	Source
gf	-1834.16	kJ/mol	Joback Method
hf	-2384.71	kJ/mol	Joback Method
hfus	42.02	kJ/mol	Joback Method
hvap	62.10	kJ/mol	Joback Method
log10ws	-6.30		Crippen Method
logp	5.549		Crippen Method
mvol	289.220	ml/mol	McGowan Method
pc	1041.25	kPa	Joback Method
rinpol	1822.00		NIST Webbook
rinpol	1822.00		NIST Webbook
tb	744.09	K	Joback Method
tc	912.92	K	Joback Method
tf	417.16	K	Joback Method
vc	1.171	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	891.20	J/mol×K	744.09	Joback Method
cpg	905.89	J/mol×K	772.23	Joback Method
cpg	919.71	J/mol×K	800.37	Joback Method
cpg	932.69	J/mol×K	828.50	Joback Method
cpg	944.88	J/mol×K	856.64	Joback Method
cpg	956.34	J/mol×K	884.78	Joback Method
cpg	967.10	J/mol×K	912.92	Joback Method

# Sources

<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=U405345&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405345&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.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.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>

# 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>hvp:</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>rlnol:</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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