

# Glutaric acid, 2,2,3,3,4,4,5,5-octafluoropentyl octyl ester

<b>Inchi:</b>	InChI=1S/C18H26F8O4/c1-2-3-4-5-6-7-11-29-13(27)9-8-10-14(28)30-12-16(21,22)18(25)
<b>InchiKey:</b>	FEYWTHVVGJAHALX-UHFFFAOYSA-N
<b>Formula:</b>	C18H26F8O4
<b>SMILES:</b>	CCCCCCCCOC(=O)CCCC(=O)OCC(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)F
<b>Mol. weight [g/mol]:</b>	458.38

## Physical Properties

Property code	Value	Unit	Source
gf	-1919.56	kJ/mol	Joback Method
hf	-2504.86	kJ/mol	Joback Method
hfus	46.82	kJ/mol	Joback Method
hvap	63.16	kJ/mol	Joback Method
log10ws	-6.34		Crippen Method
logp	5.775		Crippen Method
mcvol	293.520	ml/mol	McGowan Method
pc	1008.45	kPa	Joback Method
rinpola	1982.00		NIST Webbook
rinpola	1982.00		NIST Webbook
tb	747.85	K	Joback Method
tc	916.31	K	Joback Method
tf	433.92	K	Joback Method
vc	1.196	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	915.96	J/molxK	747.85	Joback Method
cpg	931.19	J/molxK	775.93	Joback Method
cpg	945.53	J/molxK	804.00	Joback Method
cpg	959.02	J/molxK	832.08	Joback Method
cpg	971.71	J/molxK	860.16	Joback Method
cpg	983.64	J/molxK	888.24	Joback Method
cpg	994.86	J/molxK	916.31	Joback Method

# Sources

<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.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>
<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=U359683&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U359683&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>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>rinp:</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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