

# Glutaric acid, 2,2,3,3,4,4,4-heptafluorobutyl pentadecyl ester

Inchi:	InChI=1S/C24H39F7O4/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-18-34-20(32)16-15-17-21(33)
InchiKey:	WOWBVTWAHJNVEZ-UHFFFAOYSA-N
Formula:	C24H39F7O4
SMILES:	CCCCCCCCCCCCCCCCOC(=O)CCCC(=O)OCC(F)(F)C(F)(F)C(F)(F)F
Mol. weight [g/mol]:	524.55

## Physical Properties

Property code	Value	Unit	Source
gf	-1671.79	kJ/mol	Joback Method
hf	-2427.31	kJ/mol	Joback Method
hfus	62.81	kJ/mol	Joback Method
hvap	77.72	kJ/mol	Joback Method
log10ws	-8.88		Crippen Method
logp	8.167		Crippen Method
mcvol	376.290	ml/mol	McGowan Method
pc	735.22	kPa	Joback Method
rinqol	2669.00		NIST Webbook
tb	886.30	K	Joback Method
tc	1093.48	K	Joback Method
tf	515.95	K	Joback Method
vc	1.520	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1267.64	J/molxK	886.30	Joback Method
cpg	1286.94	J/molxK	920.83	Joback Method
cpg	1304.94	J/molxK	955.36	Joback Method
cpg	1321.74	J/molxK	989.89	Joback Method
cpg	1337.45	J/molxK	1024.42	Joback Method
cpg	1352.15	J/molxK	1058.95	Joback Method
cpg	1365.96	J/molxK	1093.48	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=U377560&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U377560&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>h vap:</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>m cvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>r in pol:</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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