

# Glutaric acid, 2,2,3,3-tetrafluoropropyl nonyl ester

Inchi:	InChI=1S/C17H28F4O4/c1-2-3-4-5-6-7-8-12-24-14(22)10-9-11-15(23)25-13-17(20,21)16
InchiKey:	KNWURMWMXZIIIFM-UHFFFAOYSA-N
Formula:	C17H28F4O4
SMILES:	CCCCCCCCCOC(=O)CCCC(=O)OCC(F)(F)C(F)F
Mol. weight [g/mol]:	372.40

## Physical Properties

Property code	Value	Unit	Source
gf	-1154.42	kJ/mol	Joback Method
hf	-1682.28	kJ/mol	Joback Method
hfus	46.74	kJ/mol	Joback Method
hvap	66.80	kJ/mol	Joback Method
log10ws	-5.29		Crippen Method
logp	4.894		Crippen Method
mvol	272.350	ml/mol	McGowan Method
pc	1180.09	kPa	Joback Method
rinpol	1941.00		NIST Webbook
rinpol	1941.00		NIST Webbook
tb	734.35	K	Joback Method
tc	903.65	K	Joback Method
tf	415.45	K	Joback Method
vc	1.091	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	824.09	J/mol×K	734.35	Joback Method
cpg	839.86	J/mol×K	762.57	Joback Method
cpg	854.80	J/mol×K	790.78	Joback Method
cpg	868.93	J/mol×K	819.00	Joback Method
cpg	882.27	J/mol×K	847.22	Joback Method
cpg	894.85	J/mol×K	875.44	Joback Method
cpg	906.67	J/mol×K	903.65	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=U391517&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U391517&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>

# 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>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpola:</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

Latest version available from:

<https://www.cheméo.com/cid/119-267-4/Glutaric-acid-2-2-3-3-tetrafluoropropyl-nonyl-ester.pdf>

Generated by Cheméo on 2024-04-28 15:08:48.871067682 +0000 UTC m=+16606177.791644994.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.