

# Succinic acid, 2,2,3,3-tetrafluoropropyl 3-phenylprop-2-en-1-yl ester

**Inchi:** InChI=1S/C16H16F4O4/c17-15(18)16(19,20)11-24-14(22)9-8-13(21)23-10-4-7-12-5-2-1-

**InchiKey:** FLIOUVRYHBMII-QPJXVBHSA-N

**Formula:** C16H16F4O4

**SMILES:** O=C(CCC(=O)OCC(F)(F)C(F)F)OCC=Cc1ccccc1

**Mol. weight [g/mol]:** 348.29

## Physical Properties

Property code	Value	Unit	Source
gf	-970.21	kJ/mol	Joback Method
hf	-1307.89	kJ/mol	Joback Method
hfus	38.40	kJ/mol	Joback Method
hvap	66.80	kJ/mol	Joback Method
log10ws	-4.00		Crippen Method
logp	3.467		Crippen Method
mvol	230.200	ml/mol	McGowan Method
pc	1690.72	kPa	Joback Method
rinpol	2048.00		NIST Webbook
rinpol	2048.00		NIST Webbook
tb	742.31	K	Joback Method
tc	934.08	K	Joback Method
tf	425.52	K	Joback Method
vc	0.906	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	658.75	J/molxK	742.31	Joback Method
cpg	671.79	J/molxK	774.27	Joback Method
cpg	683.94	J/molxK	806.23	Joback Method
cpg	695.25	J/molxK	838.20	Joback Method
cpg	705.75	J/molxK	870.16	Joback Method
cpg	715.48	J/molxK	902.12	Joback Method
cpg	724.50	J/molxK	934.08	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U391041&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U391041&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.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>

# 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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