

# Succinic acid, 1,1,1-trifluoroprop-2-yl 2-decyl ester

Inchi:	InChI=1S/C17H29F3O4/c1-4-5-6-7-8-9-10-13(2)23-15(21)11-12-16(22)24-14(3)17(18,19
InchiKey:	YKPDLEYWKJLAOG-UHFFFAOYSA-N
Formula:	C17H29F3O4
SMILES:	CCCCCCCCC(C)OC(=O)CCC(=O)OC(C)C(F)(F)F
Mol. weight [g/mol]:	354.40

## Physical Properties

Property code	Value	Unit	Source
gf	-962.05	kJ/mol	Joback Method
hf	-1491.45	kJ/mol	Joback Method
hfus	40.14	kJ/mol	Joback Method
hvap	67.22	kJ/mol	Joback Method
log10ws	-5.55		Crippen Method
logp	4.943		Crippen Method
mcvol	270.580	ml/mol	McGowan Method
pc	1224.27	kPa	Joback Method
rinpol	1760.00		NIST Webbook
rinpol	1760.00		NIST Webbook
tb	734.64	K	Joback Method
tc	907.96	K	Joback Method
tf	399.86	K	Joback Method
vc	1.067	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	816.88	J/molxK	734.64	Joback Method
cpg	833.12	J/molxK	763.53	Joback Method
cpg	848.48	J/molxK	792.41	Joback Method
cpg	862.99	J/molxK	821.30	Joback Method
cpg	876.67	J/molxK	850.18	Joback Method
cpg	889.54	J/molxK	879.07	Joback Method
cpg	901.63	J/molxK	907.96	Joback Method

# Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U390528&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U390528&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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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