

# Succinic acid, tridecyl 2,2,2-trifluoroethyl ester

**Inchi:** InChI=1S/C19H33F3O4/c1-2-3-4-5-6-7-8-9-10-11-12-15-25-17(23)13-14-18(24)26-16-19  
**InchiKey:** CNYBSIBAQQKJMW-UHFFFAOYSA-N  
**Formula:** C19H33F3O4  
**SMILES:** CCCCCCCCCCCCCOC(=O)CCC(=O)OCC(F)(F)F  
**Mol. weight [g/mol]:** 382.46

## Physical Properties

Property code	Value	Unit	Source
gf	-940.33	kJ/mol	Joback Method
hf	-1522.17	kJ/mol	Joback Method
hfus	52.37	kJ/mol	Joback Method
hvap	72.45	kJ/mol	Joback Method
log10ws	-6.16		Crippen Method
logp	5.726		Crippen Method
mcvol	298.760	ml/mol	McGowan Method
pc	1063.79	kPa	Joback Method
rinpol	2118.00		NIST Webbook
rinpol	2118.00		NIST Webbook
tb	781.28	K	Joback Method
tc	957.97	K	Joback Method
tf	452.40	K	Joback Method
vc	1.190	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	932.72	J/mol×K	781.28	Joback Method
cpg	949.67	J/mol×K	810.73	Joback Method
cpg	965.68	J/mol×K	840.18	Joback Method
cpg	980.77	J/mol×K	869.62	Joback Method
cpg	994.97	J/mol×K	899.07	Joback Method
cpg	1008.31	J/mol×K	928.52	Joback Method
cpg	1020.82	J/mol×K	957.97	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=U382471&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U382471&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>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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