

Succinic acid, 2,2,3,3-tetrafluoropropyl oct-1-en-3-yl ester

Inchi:	InChI=1S/C15H22F4O4/c1-3-5-6-7-11(4-2)23-13(21)9-8-12(20)22-10-15(18,19)14(16)17
InchiKey:	BPZJANXOJAWFTM-UHFFFAOYSA-N
Formula:	C15H22F4O4
SMILES:	<chem>C=CC(CCCCC)OC(=O)CCC(=O)OCC(F)(F)C(F)F</chem>
Mol. weight [g/mol]:	342.33

Physical Properties

Property code	Value	Unit	Source
gf	-1085.86	kJ/mol	Joback Method
hf	-1520.85	kJ/mol	Joback Method
hfus	36.76	kJ/mol	Joback Method
hvap	61.29	kJ/mol	Joback Method
log10ws	-4.42		Crippen Method
logp	3.888		Crippen Method
mcvol	239.870	ml/mol	McGowan Method
pc	1403.79	kPa	Joback Method
rinpol	1674.00		NIST Webbook
rinpol	1674.00		NIST Webbook
tb	684.83	K	Joback Method
tc	853.06	K	Joback Method
tf	376.15	K	Joback Method
vc	0.954	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	688.27	J/mol×K	684.83	Joback Method
cpg	702.69	J/mol×K	712.87	Joback Method
cpg	716.35	J/mol×K	740.91	Joback Method
cpg	729.28	J/mol×K	768.95	Joback Method
cpg	741.50	J/mol×K	796.99	Joback Method
cpg	753.02	J/mol×K	825.03	Joback Method
cpg	763.87	J/mol×K	853.06	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391315&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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