

Succinic acid, 3-methylbut-2-yl 2,2,2-trichloroethyl ester

Inchi:	InChI=1S/C11H17Cl3O4/c1-7(2)8(3)18-10(16)5-4-9(15)17-6-11(12,13)14/h7-8H,4-6H2,1
InchiKey:	OGZAH CZVLHTAMY-UHFFFAOYSA-N
Formula:	C11H17Cl3O4
SMILES:	CC(C)C(C)OC(=O)CCC(=O)OCC(Cl)(Cl)Cl
Mol. weight [g/mol]:	319.61

Physical Properties

Property code	Value	Unit	Source
gf	-463.93	kJ/mol	Joback Method
hf	-826.50	kJ/mol	Joback Method
hfus	27.95	kJ/mol	Joback Method
hvap	69.47	kJ/mol	Joback Method
log10ws	-3.58		Crippen Method
logp	3.268		Crippen Method
mvol	217.450	ml/mol	McGowan Method
pc	1961.34	kPa	Joback Method
rinpol	1758.00		NIST Webbook
rinpol	1758.00		NIST Webbook
tb	711.84	K	Joback Method
tc	917.75	K	Joback Method
tf	420.23	K	Joback Method
vc	0.824	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	550.10	J/mol×K	711.84	Joback Method
cpg	562.43	J/mol×K	746.16	Joback Method
cpg	573.93	J/mol×K	780.48	Joback Method
cpg	584.61	J/mol×K	814.79	Joback Method
cpg	594.51	J/mol×K	849.11	Joback Method
cpg	603.64	J/mol×K	883.43	Joback Method
cpg	612.03	J/mol×K	917.75	Joback Method
dvisc	0.0015182	Paxs	420.23	Joback Method

dvisc	0.0007401	Paxs	468.83	Joback Method
dvisc	0.0004129	Paxs	517.43	Joback Method
dvisc	0.0002546	Paxs	566.04	Joback Method
dvisc	0.0001695	Paxs	614.64	Joback Method
dvisc	0.0001198	Paxs	663.24	Joback Method
dvisc	0.0000887	Paxs	711.84	Joback Method

Sources

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=U390230&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/121-816-1/Succinic-acid-3-methylbut-2-yl-2-2-trichloroethyl-ester.pdf>

Generated by Cheméo on 2024-05-01 13:48:26.120723186 +0000 UTC m=+16860555.041300502.

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