

Succinic acid, 2,2-dichloroethyl 2,4,4-trimethylpentyl ester

Inchi:	InChI=1S/C14H24Cl2O4/c1-10(7-14(2,3)4)8-19-12(17)5-6-13(18)20-9-11(15)16/h10-11H
InchiKey:	BSRXMLQQEATODU-UHFFFAOYSA-N
Formula:	C14H24Cl2O4
SMILES:	CC(COC(=O)CCC(=O)OCC(Cl)Cl)CC(C)(C)C
Mol. weight [g/mol]:	327.24

Physical Properties

Property code	Value	Unit	Source
gf	-426.74	kJ/mol	Joback Method
hf	-872.68	kJ/mol	Joback Method
hfus	31.52	kJ/mol	Joback Method
hvap	71.77	kJ/mol	Joback Method
log10ws	-3.84		Crippen Method
logp	3.729		Crippen Method
mvol	247.480	ml/mol	McGowan Method
pc	1588.54	kPa	Joback Method
rinpol	1908.00		NIST Webbook
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tb	743.05	K	Joback Method
tc	939.71	K	Joback Method
tf	424.12	K	Joback Method
vc	0.943	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	684.57	J/molxK	743.05	Joback Method
cpg	699.17	J/molxK	775.83	Joback Method
cpg	712.85	J/molxK	808.60	Joback Method
cpg	725.63	J/molxK	841.38	Joback Method
cpg	737.55	J/molxK	874.16	Joback Method
cpg	748.63	J/molxK	906.93	Joback Method
cpg	758.90	J/molxK	939.71	Joback Method
dvisc	0.0014003	Paxs	424.12	Joback Method

dvisc	0.0006329	Paxs	477.27	Joback Method
dvisc	0.0003354	Paxs	530.43	Joback Method
dvisc	0.0001996	Paxs	583.59	Joback Method
dvisc	0.0001295	Paxs	636.74	Joback Method
dvisc	0.0000898	Paxs	689.89	Joback Method
dvisc	0.0000656	Paxs	743.05	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=U389542&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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