

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

Inchi:	InChI=1S/C12H19Cl3O4/c1-4-9(8(2)3)19-11(17)6-5-10(16)18-7-12(13,14)15/h8-9H,4-7H
InchiKey:	BUBXDLJRIRMJOQ-UHFFFAOYSA-N
Formula:	C12H19Cl3O4
SMILES:	CCC(OC(=O)CCC(=O)OCC(Cl)(Cl)Cl)C(C)C
Mol. weight [g/mol]:	333.64

Physical Properties

Property code	Value	Unit	Source
gf	-455.51	kJ/mol	Joback Method
hf	-847.14	kJ/mol	Joback Method
hfus	30.54	kJ/mol	Joback Method
hvap	71.70	kJ/mol	Joback Method
log10ws	-4.00		Crippen Method
logp	3.658		Crippen Method
mcvol	231.540	ml/mol	McGowan Method
pc	1804.63	kPa	Joback Method
rinpol	1835.00		NIST Webbook
rinpol	1835.00		NIST Webbook
tb	734.72	K	Joback Method
tc	938.40	K	Joback Method
tf	431.50	K	Joback Method
vc	0.879	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	602.66	J/mol×K	734.72	Joback Method
cpg	615.44	J/mol×K	768.67	Joback Method
cpg	627.36	J/mol×K	802.61	Joback Method
cpg	638.44	J/mol×K	836.56	Joback Method
cpg	648.71	J/mol×K	870.51	Joback Method
cpg	658.18	J/mol×K	904.45	Joback Method
cpg	666.89	J/mol×K	938.40	Joback Method
dvisc	0.0013481	Paxs	431.50	Joback Method

dvisc	0.0006492	Paxs	482.04	Joback Method
dvisc	0.0003592	Paxs	532.57	Joback Method
dvisc	0.0002202	Paxs	583.11	Joback Method
dvisc	0.0001459	Paxs	633.65	Joback Method
dvisc	0.0001028	Paxs	684.18	Joback Method
dvisc	0.0000760	Paxs	734.72	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=U390231&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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