

Adipic acid, 2,2-dichloroethyl propyl ester

Inchi:	InChI=1S/C11H18Cl2O4/c1-2-7-16-10(14)5-3-4-6-11(15)17-8-9(12)13/h9H,2-8H2,1H3
InchiKey:	SAFVILILGJGGST-UHFFFAOYSA-N
Formula:	C11H18Cl2O4
SMILES:	CCCOC(=O)CCCCC(=O)OCC(Cl)Cl
Mol. weight [g/mol]:	285.16

Physical Properties

Property code	Value	Unit	Source
gf	-452.40	kJ/mol	Joback Method
hf	-796.73	kJ/mol	Joback Method
hfus	34.69	kJ/mol	Joback Method
hvap	66.77	kJ/mol	Joback Method
log10ws	-3.07		Crippen Method
logp	2.847		Crippen Method
mcvol	205.210	ml/mol	McGowan Method
pc	1978.82	kPa	Joback Method
rinpol	1798.00		NIST Webbook
rinpol	1798.00		NIST Webbook
tb	678.08	K	Joback Method
tc	868.17	K	Joback Method
tf	402.89	K	Joback Method
vc	0.791	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	521.24	J/molxK	678.08	Joback Method
cpg	578.00	J/molxK	836.49	Joback Method
cpg	568.00	J/molxK	804.80	Joback Method
cpg	557.33	J/molxK	773.12	Joback Method
cpg	545.98	J/molxK	741.44	Joback Method
cpg	533.95	J/molxK	709.76	Joback Method
cpg	587.33	J/molxK	868.17	Joback Method
dvisc	0.0001309	Paxs	678.08	Joback Method

dvisc	0.0001703	Paxs	632.21	Joback Method
dvisc	0.0002310	Paxs	586.35	Joback Method
dvisc	0.0003300	Paxs	540.48	Joback Method
dvisc	0.0005035	Paxs	494.62	Joback Method
dvisc	0.0008376	Paxs	448.75	Joback Method
dvisc	0.0015647	Paxs	402.89	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U353576&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	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

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