

Sebacic acid, 2,4-dichloronaphth-1-yl ethyl ester

Inchi:	InChI=1S/C22H26Cl2O4/c1-2-27-20(25)13-7-5-3-4-6-8-14-21(26)28-22-17-12-10-9-11-16
InchiKey:	TVUMIAIWXWZKMG-UHFFFAOYSA-N
Formula:	C22H26Cl2O4
SMILES:	CCOC(=O)CCCCCCCC(=O)Oc1c(Cl)cc(Cl)c2cccc12
Mol. weight [g/mol]:	425.35

Physical Properties

Property code	Value	Unit	Source
gf	-167.17	kJ/mol	Joback Method
hf	-625.30	kJ/mol	Joback Method
hfus	56.60	kJ/mol	Joback Method
hvap	97.55	kJ/mol	Joback Method
log10ws	-8.01		Crippen Method
logp	6.736		Crippen Method
mvol	316.980	ml/mol	McGowan Method
pc	1293.00	kPa	Joback Method
rinpol	3267.00		NIST Webbook
rinpol	3267.00		NIST Webbook
tb	990.80	K	Joback Method
tc	1217.56	K	Joback Method
tf	638.54	K	Joback Method
vc	1.228	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	964.32	J/molxK	990.80	Joback Method
cpg	976.87	J/molxK	1028.59	Joback Method
cpg	988.32	J/molxK	1066.39	Joback Method
cpg	998.72	J/molxK	1104.18	Joback Method
cpg	1008.12	J/molxK	1141.97	Joback Method
cpg	1016.58	J/molxK	1179.77	Joback Method
cpg	1024.16	J/molxK	1217.56	Joback Method
dvisc	0.0003551	Paxs	638.54	Joback Method

dvisc	0.0002377	Paxs	697.25	Joback Method
dvisc	0.0001694	Paxs	755.96	Joback Method
dvisc	0.0001267	Paxs	814.67	Joback Method
dvisc	0.0000986	Paxs	873.38	Joback Method
dvisc	0.0000792	Paxs	932.09	Joback Method
dvisc	0.0000652	Paxs	990.80	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U354953&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
hvap:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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