

Succinic acid, dodec-2-en-1-yl 2-ethoxyethyl ester

Inchi:	InChI=1S/C20H36O5/c1-3-5-6-7-8-9-10-11-12-13-16-24-19(21)14-15-20(22)25-18-17-23
InchiKey:	CHSZHXSRWZRWSH-OUKQBFOZSA-N
Formula:	C20H36O5
SMILES:	CCCCCCCCC=CCOC(=O)CCC(=O)OCCOCC
Mol. weight [g/mol]:	356.50

Physical Properties

Property code	Value	Unit	Source
gf	-375.10	kJ/mol	Joback Method
hf	-960.73	kJ/mol	Joback Method
hfus	54.52	kJ/mol	Joback Method
hvap	80.79	kJ/mol	Joback Method
log10ws	-4.86		Crippen Method
logp	4.586		Crippen Method
mvol	309.110	ml/mol	McGowan Method
pc	1103.01	kPa	Joback Method
rinpol	2456.00		NIST Webbook
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tb	836.16	K	Joback Method
tc	1025.46	K	Joback Method
tf	476.63	K	Joback Method
vc	1.202	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	974.97	J/molxK	836.16	Joback Method
cpg	992.42	J/molxK	867.71	Joback Method
cpg	1008.80	J/molxK	899.26	Joback Method
cpg	1024.12	J/molxK	930.81	Joback Method
cpg	1038.40	J/molxK	962.36	Joback Method
cpg	1051.66	J/molxK	993.91	Joback Method
cpg	1063.92	J/molxK	1025.46	Joback Method
dvisc	0.0005327	Paxs	476.63	Joback Method

dvisc	0.0002620	Paxs	536.55	Joback Method
dvisc	0.0001486	Paxs	596.47	Joback Method
dvisc	0.0000935	Paxs	656.39	Joback Method
dvisc	0.0000635	Paxs	716.32	Joback Method
dvisc	0.0000459	Paxs	776.24	Joback Method
dvisc	0.0000347	Paxs	836.16	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=U390674&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	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:	Log10 of Water solubility in mol/l
logp:	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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