

2-Dodecen-1-yl(-)succinic anhydride

Other names:	2,5-Furandione, 3-dodecenyl- n-Dodecenylsuccinic anhydride Dodecenyl succinic anhydride 2,5-Furandione, 3-(2-dodecenyl)dihydro- 2-Dodecen-1-ylsuccinic anhydride 3-(2-dodecenyl)succinic anhydride
Inchi:	InChI=1S/C16H26O3/c1-2-3-4-5-6-7-8-9-10-11-12-14-13-15(17)19-16(14)18/h10-11,14H
InchiKey:	UYCICMIUKYEYEU-ZHACJKMWSA-N
Formula:	C16H26O3
SMILES:	CCCCCCCCC=CCC1CC(=O)OC1=O
Mol. weight [g/mol]:	266.38
CAS:	19780-11-1

Physical Properties

Property code	Value	Unit	Source
gf	-130.69	kJ/mol	Joback Method
hf	-603.27	kJ/mol	Joback Method
hfus	38.33	kJ/mol	Joback Method
hvap	64.43	kJ/mol	Joback Method
log10ws	-4.66		Crippen Method
logp	4.163		Crippen Method
mcvol	230.150	ml/mol	McGowan Method
pc	1651.11	kPa	Joback Method
rinpol	1966.00		NIST Webbook
rinpol	1966.00		NIST Webbook
tb	747.51	K	Joback Method
tc	954.60	K	Joback Method
tf	438.91	K	Joback Method
vc	0.887	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	704.97	J/mol×K	747.51	Joback Method

cpg	723.63	J/mol×K	782.03	Joback Method
cpg	741.15	J/mol×K	816.54	Joback Method
cpg	757.52	J/mol×K	851.06	Joback Method
cpg	772.76	J/mol×K	885.57	Joback Method
cpg	786.88	J/mol×K	920.09	Joback Method
cpg	799.87	J/mol×K	954.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19780111&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
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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