

Succinic acid, 3,7-dimethyloct-6-en-1-yl heptyl ester

Inchi:	InChI=1S/C21H38O4/c1-5-6-7-8-9-16-24-20(22)13-14-21(23)25-17-15-19(4)12-10-11-18
InchiKey:	FUHDOVPGASSMJS-UHFFFAOYSA-N
Formula:	C21H38O4
SMILES:	CCCCCCCOC(=O)CCC(=O)OCCC(C)CCC=C(C)C
Mol. weight [g/mol]:	354.52

Physical Properties

Property code	Value	Unit	Source
gf	-272.67	kJ/mol	Joback Method
hf	-864.22	kJ/mol	Joback Method
hfus	51.09	kJ/mol	Joback Method
hvap	80.30	kJ/mol	Joback Method
log10ws	-5.95		Crippen Method
logp	5.596		Crippen Method
mvol	317.330	ml/mol	McGowan Method
pc	1056.20	kPa	Joback Method
rinpol	2371.00		NIST Webbook
rinpol	2371.00		NIST Webbook
tb	836.06	K	Joback Method
tc	1026.55	K	Joback Method
tf	436.71	K	Joback Method
vc	1.234	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1004.56	J/mol×K	836.06	Joback Method
cpg	1022.78	J/mol×K	867.81	Joback Method
cpg	1039.93	J/mol×K	899.56	Joback Method
cpg	1056.04	J/mol×K	931.31	Joback Method
cpg	1071.13	J/mol×K	963.06	Joback Method
cpg	1085.24	J/mol×K	994.80	Joback Method
cpg	1098.40	J/mol×K	1026.55	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U353341&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.cheméo.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
h vap:	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
r in 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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