

Succinic acid, butyl dec-4-enyl ester

Inchi:	InChI=1S/C18H32O4/c1-3-5-7-8-9-10-11-12-16-22-18(20)14-13-17(19)21-15-6-4-2/h9-10
InchiKey:	URPYOZYEVFPFSG-MDZDMXLPSA-N
Formula:	C18H32O4
SMILES:	CCCCC=CCCCOC(=O)CCC(=O)OCCCC
Mol. weight [g/mol]:	312.44

Physical Properties

Property code	Value	Unit	Source
gf	-286.94	kJ/mol	Joback Method
hf	-787.23	kJ/mol	Joback Method
hfus	48.15	kJ/mol	Joback Method
hvap	73.93	kJ/mol	Joback Method
log10ws	-4.94		Crippen Method
logp	4.570		Crippen Method
mcvol	275.060	ml/mol	McGowan Method
pc	1273.69	kPa	Joback Method
rinpol	2123.00		NIST Webbook
rinpol	2123.00		NIST Webbook
tb	767.98	K	Joback Method
tc	950.09	K	Joback Method
tf	431.86	K	Joback Method
vc	1.071	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	825.20	J/mol×K	767.98	Joback Method
cpg	842.07	J/mol×K	798.33	Joback Method
cpg	858.05	J/mol×K	828.68	Joback Method
cpg	873.15	J/mol×K	859.03	Joback Method
cpg	887.40	J/mol×K	889.39	Joback Method
cpg	900.81	J/mol×K	919.74	Joback Method
cpg	913.41	J/mol×K	950.09	Joback Method
dvisc	0.0009629	Paxs	431.86	Joback Method

dvisc	0.0004674	Paxs	487.88	Joback Method
dvisc	0.0002633	Paxs	543.90	Joback Method
dvisc	0.0001651	Paxs	599.92	Joback Method
dvisc	0.0001121	Paxs	655.94	Joback Method
dvisc	0.0000809	Paxs	711.96	Joback Method
dvisc	0.0000613	Paxs	767.98	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U353463&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

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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