Sebacic acid, di(pent-4-en-2-yl) ester

Inchi: InChI=1S/C20H34O4/c1-5-13-17(3)23-19(21)15-11-9-7-8-10-12-16-20(22)24-18(4)14-6-2
InchiKey: KRIHJLVYCYLOBE-UHFFFAOYSA-N
Formula: C20H34O4
SMILES: C=CCC(C)OC(=O)CCCCCCCCC(=O)OC(C)CC=C
Mol. weight [g/mol]: 338.48

Physical Properties

Property code	Value	Unit	Source
gf	-179.52	kJ/mol	Joback Method
hf	-705.43	kJ/mol	Joback Method
hfus	43.52	kJ/mol	Joback Method
hvap	76.31	kJ/mol	Joback Method
log10ws	-5.85		Crippen Method
logp	5.123		Crippen Method
mcvol	298.940	ml/mol	McGowan Method
pc	1152.22	kPa	Joback Method
rinpol	2222.00		NIST Webbook
tb	802.06	K	Joback Method
tc	988.66	K	Joback Method
tf	425.96	K	Joback Method
vc	1.153	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	916.43	J/mol×K	802.06	Joback Method
cpg	993.36	J/mol×K	957.56	Joback Method
cpg	979.91	J/mol×K	926.46	Joback Method
cpg	965.52	J/mol×K	895.36	Joback Method
cpg	950.16	J/mol×K	864.26	Joback Method
cpg	933.80	J/mol×K	833.16	Joback Method
cpg	1005.90	J/mol×K	988.66	Joback Method
dvisc	0.0000512	Pa×s	802.06	Joback Method
dvisc	0.0000693	Pa×s	739.38	Joback Method

dvisc	0.0000994	Pa×s	676.69	Joback Method
dvisc	0.0001534	Pa×s	614.01	Joback Method
dvisc	0.0002613	Pa×s	551.33	Joback Method
dvisc	0.0005101	Pa×s	488.64	Joback Method
dvisc	0.0012128	Pa×s	425.96	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U355958&Units=SI

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