Sebacic acid, decyl 3-methylbut-3-enyl ester

Inchi: InChI=1S/C25H46O4/c1-4-5-6-7-8-11-14-17-21-28-24(26)18-15-12-9-10-13-16-19-25(27
InchiKey: CBVPUUJOTZIZCB-UHFFFAOYSA-N
Formula: C25H46O4
SMILES: C=C(C)CCOC(=O)CCCCCCCCC(=O)OCCCCCCCCCC
Mol. weight [g/mol]: 410.63

Physical Properties

Property code	Value	Unit	Source
gf	-228.93	kJ/mol	Joback Method
hf	-933.29	kJ/mol	Joback Method
hfus	63.49	kJ/mol	Joback Method
hvap	88.97	kJ/mol	Joback Method
log10ws	-7.87		Crippen Method
logp	7.300		Crippen Method
mcvol	373.690	ml/mol	McGowan Method
pc	826.21	kPa	Joback Method
rinpol	2856.00		NIST Webbook
rinpol	2856.00		NIST Webbook
tb	920.54	K	Joback Method
tc	1128.93	K	Joback Method
tf	500.11	K	Joback Method
vc	1.466	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1251.49	J/mol×K	920.54	Joback Method
cpg	1271.58	J/mol×K	955.27	Joback Method
cpg	1290.25	J/mol×K	990.00	Joback Method
cpg	1307.53	J/mol×K	1024.74	Joback Method
cpg	1323.46	J/mol×K	1059.47	Joback Method
cpg	1338.11	J/mol×K	1094.20	Joback Method
cpg	1351.50	J/mol×K	1128.93	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U355941&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