Succinic acid, 2-ethylhexyl 4-(4-methoxyphenyl)cyclohexyl ester

Inchi: InChI=1S/C25H38O5/c1-4-6-7-19(5-2)18-29-24(26)16-17-25(27)30-23-14-10-21(11-15-2

InchiKey: NEJNFHXTOKTMJU-UHFFFAOYSA-N

Formula: C25H38O5

SMILES: CCCCC(CC)COC(=O)CCC(=O)OC1CCC(c2ccc(OC)cc2)CC1

Mol. weight [g/mol]: 418.57

Physical Properties

Property code	Value	Unit	Source
gf	-296.14	kJ/mol	Joback Method
hf	-927.39	kJ/mol	Joback Method
hfus	50.30	kJ/mol	Joback Method
hvap	94.64	kJ/mol	Joback Method
log10ws	-6.55		Crippen Method
logp	5.804		Crippen Method
mcvol	349.240	ml/mol	McGowan Method
pc	1077.10	kPa	Joback Method
rinpol	3160.00		NIST Webbook
rinpol	3160.00		NIST Webbook
tb	992.50	K	Joback Method
tc	1217.40	K	Joback Method
tf	565.14	K	Joback Method
vc	1.319	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1210.05	J/mol×K	992.50	Joback Method
cpg	1269.32	J/mol×K	1179.92	Joback Method
cpg	1261.27	J/mol×K	1142.43	Joback Method
cpg	1251.34	J/mol×K	1104.95	Joback Method
cpg	1239.51	J/mol×K	1067.47	Joback Method
cpg	1225.75	J/mol×K	1029.98	Joback Method
cpg	1275.53	J/mol×K	1217.40	Joback Method
dvisc	0.0000246	Pa×s	992.50	Joback Method

dvisc	0.0000320	Pa×s	921.27	Joback Method
dvisc	0.0000437	Pa×s	850.05	Joback Method
dvisc	0.0000632	Pa×s	778.82	Joback Method
dvisc	0.0000983	Pa×s	707.59	Joback Method
dvisc	0.0001689	Pa×s	636.37	Joback Method
dvisc	0.0003324	Pa×s	565.14	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U390040&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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