Sebacic acid, diphenyl ester

Inchi: InChI=1S/C22H26O4/c23-21(25-19-13-7-5-8-14-19)17-11-3-1-2-4-12-18-22(24)26-20-15
InchiKey: ODVYFOLTLWONHF-UHFFFAOYSA-N
Formula: C22H26O4
SMILES: O=C(CCCCCCCCC(=O)Oc1ccccc1)Oc1ccccc1
Mol. weight [g/mol]: 354.44

Physical Properties

Property code	Value	Unit	Source
gf	-108.66	kJ/mol	Joback Method
hf	-513.95	kJ/mol	Joback Method
hfus	46.39	kJ/mol	Joback Method
hvap	87.43	kJ/mol	Joback Method
log10ws	-6.26		Crippen Method
logp	5.318		Crippen Method
mcvol	288.200	ml/mol	McGowan Method
pc	1506.98	kPa	Joback Method
rinpol	2936.00		NIST Webbook
tb	908.70	K	Joback Method
tc	1129.57	K	Joback Method
tf	534.86	K	Joback Method
vc	1.099	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	898.88	J/mol×K	908.70	Joback Method
cpg	958.54	J/mol×K	1092.76	Joback Method
cpg	949.02	J/mol×K	1055.95	Joback Method
cpg	938.34	J/mol×K	1019.14	Joback Method
cpg	926.46	J/mol×K	982.32	Joback Method
cpg	913.32	J/mol×K	945.51	Joback Method
cpg	966.97	J/mol×K	1129.57	Joback Method
dvisc	0.0000417	Pa×s	908.70	Joback Method
dvisc	0.0000539	Pa×s	846.39	Joback Method

dvisc	0.0000727	Pa×s	784.09	Joback Method
dvisc	0.0001033	Pa×s	721.78	Joback Method
dvisc	0.0001567	Pa×s	659.47	Joback Method
dvisc	0.0002594	Pa×s	597.17	Joback Method
dvisc	0.0004828	Pa×s	534.86	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U354521&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