1-Naphthaleneacetic acid, dec-2-yl ester

Inchi: InChI=1S/C22H30O2/c1-3-4-5-6-7-8-12-18(2)24-22(23)17-20-15-11-14-19-13-9-10-16-21
InchiKey: DYGPXJXWLAPOJP-UHFFFAOYSA-N
Formula: C22H30O2
SMILES: CCCCCCCCC(C)OC(=O)Cc1cccc2ccccc12
Mol. weight [g/mol]: 326.47

Physical Properties

Property code	Value	Unit	Source
gf	107.43	kJ/mol	Joback Method
hf	-331.36	kJ/mol	Joback Method
hfus	42.67	kJ/mol	Joback Method
hvap	77.91	kJ/mol	Joback Method
log10ws	-7.24		Crippen Method
logp	6.065		Crippen Method
mcvol	285.060	ml/mol	McGowan Method
pc	1356.63	kPa	Joback Method
rinpol	1340.00		NIST Webbook
rinpol	1340.00		NIST Webbook
tb	829.25	K	Joback Method
tc	1037.23	K	Joback Method
tf	466.50	K	Joback Method
vc	1.099	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	874.56	J/mol×K	829.25	Joback Method
cpg	951.00	J/mol×K	1002.56	Joback Method
cpg	937.62	J/mol×K	967.90	Joback Method
cpg	923.35	J/mol×K	933.24	Joback Method
cpg	908.13	J/mol×K	898.58	Joback Method
cpg	891.89	J/mol×K	863.91	Joback Method
cpg	963.56	J/mol×K	1037.23	Joback Method
dvisc	0.0001022	Pa×s	829.25	Joback Method

dvisc	0.0001292	Pa×s	768.79	Joback Method
dvisc	0.0001700	Pa×s	708.33	Joback Method
dvisc	0.0002354	Pa×s	647.88	Joback Method
dvisc	0.0003487	Pa×s	587.42	Joback Method
dvisc	0.0005652	Pa×s	526.96	Joback Method
dvisc	0.0010383	Pa×s	466.50	Joback Method

Sources

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=U415052&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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