1-Naphthoic acid, 2-propylphenyl ester

Inchi: InChI=1S/C20H18O2/c1-2-8-16-10-4-6-14-19(16)22-20(21)18-13-7-11-15-9-3-5-12-17(15
InchiKey: ZDWDYNIHLPAHBU-UHFFFAOYSA-N
Formula: C20H18O2
SMILES: CCCc1ccccc1OC(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 290.36

Physical Properties

Property code	Value	Unit	Source
gf	195.81	kJ/mol	Joback Method
hf	-59.74	kJ/mol	Joback Method
hfus	34.67	kJ/mol	Joback Method
hvap	76.79	kJ/mol	Joback Method
log10ws	-6.58		Crippen Method
logp	5.011		Crippen Method
mcvol	233.120	ml/mol	McGowan Method
pc	2038.23	kPa	Joback Method
rinpol	2503.00		NIST Webbook
tb	815.59	K	Joback Method
tc	1057.88	K	Joback Method
tf	497.90	K	Joback Method
vc	0.885	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	664.67	J/mol×K	815.59	Joback Method
cpg	729.38	J/mol×K	1017.50	Joback Method
cpg	718.46	J/mol×K	977.12	Joback Method
cpg	706.63	J/mol×K	936.73	Joback Method
cpg	693.78	J/mol×K	896.35	Joback Method
cpg	679.83	J/mol×K	855.97	Joback Method
cpg	739.47	J/mol×K	1057.88	Joback Method
dvisc	0.0001487	Pa×s	815.59	Joback Method
dvisc	0.0001798	Pa×s	762.64	Joback Method

dvisc	0.0002236	Pa×s	709.69	Joback Method
dvisc	0.0002881	Pa×s	656.75	Joback Method
dvisc	0.0003879	Pa×s	603.80	Joback Method
dvisc	0.0005531	Pa×s	550.85	Joback Method
dvisc	0.0008505	Pa×s	497.90	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U355691&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
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