1-Naphthoic acid, undec-2-enyl ester

Inchi: InChI=1S/C22H28O2/c1-2-3-4-5-6-7-8-9-12-18-24-22(23)21-17-13-15-19-14-10-11-16-20
InchiKey: VYEGLAUDOQKZHQ-FMIVXFBMSA-N
Formula: C22H28O2
SMILES: CCCCCCCCC=CCOC(=O)c1cccc2ccccc12
Mol. weight [g/mol]: 324.46

Physical Properties

Property code	Value	Unit	Source
gf	190.09	kJ/mol	Joback Method
hf	-208.86	kJ/mol	Joback Method
hfus	46.40	kJ/mol	Joback Method
hvap	78.26	kJ/mol	Joback Method
log10ws	-7.56		Crippen Method
logp	6.303		Crippen Method
mcvol	280.760	ml/mol	McGowan Method
pc	1401.69	kPa	Joback Method
rinpol	2630.00		NIST Webbook
tb	833.85	K	Joback Method
tc	1044.63	K	Joback Method
tf	476.42	K	Joback Method
vc	1.085	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	847.90	J/mol×K	833.85	Joback Method
cpg	864.64	J/mol×K	868.98	Joback Method
cpg	880.38	J/mol×K	904.11	Joback Method
cpg	895.20	J/mol×K	939.24	Joback Method
cpg	909.19	J/mol×K	974.37	Joback Method
cpg	922.43	J/mol×K	1009.50	Joback Method
cpg	934.99	J/mol×K	1044.63	Joback Method
dvisc	0.0008519	Pa×s	476.42	Joback Method
dvisc	0.0004854	Pa×s	535.99	Joback Method

dvisc	0.0003095	Pa×s	595.56	Joback Method
dvisc	0.0002142	Pa×s	655.13	Joback Method
dvisc	0.0001576	Pa×s	714.71	Joback Method
dvisc	0.0001216	Pa×s	774.28	Joback Method
dvisc	0.0000973	Pa×s	833.85	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U308826&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