9H-Fluorene-9-carboxylic acid, decyl ester

Inchi: InChI=1S/C24H30O2/c1-2-3-4-5-6-7-8-13-18-26-24(25)23-21-16-11-9-14-19(21)20-15-10
InchiKey: AZFICKAQMCIMCF-UHFFFAOYSA-N
Formula: C24H30O2
SMILES: CCCCCCCCCCOC(=O)C1c2ccccc2-c2ccccc21
Mol. weight [g/mol]: 350.49

Physical Properties

Property code	Value	Unit	Source
gf	207.79	kJ/mol	Joback Method
hf	-248.25	kJ/mol	Joback Method
hfus	50.34	kJ/mol	Joback Method
hvap	83.62	kJ/mol	Joback Method
log10ws	-7.85		Crippen Method
logp	6.483		Crippen Method
mcvol	298.080	ml/mol	McGowan Method
pc	1308.95	kPa	Joback Method
rinpol	3322.00		NIST Webbook
rinpol	3322.00		NIST Webbook
tb	886.33	K	Joback Method
tc	1100.98	K	Joback Method
tf	535.26	K	Joback Method
vc	1.161	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	947.11	J/mol×K	886.33	Joback Method
cpg	1023.83	J/mol×K	1065.21	Joback Method
cpg	1009.96	J/mol×K	1029.43	Joback Method
cpg	995.46	J/mol×K	993.66	Joback Method
cpg	980.21	J/mol×K	957.88	Joback Method
cpg	964.13	J/mol×K	922.11	Joback Method
cpg	1037.17	J/mol×K	1100.98	Joback Method
dvisc	0.0003054	Pa×s	886.33	Joback Method

dvisc	0.0003571	Pa×s	827.82	Joback Method
dvisc	0.0004275	Pa×s	769.31	Joback Method
dvisc	0.0005273	Pa×s	710.79	Joback Method
dvisc	0.0006753	Pa×s	652.28	Joback Method
dvisc	0.0009081	Pa×s	593.77	Joback Method
dvisc	0.0013027	Pa×s	535.26	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415130&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