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

Inchi: InChI=1S/C28H38O2/c1-2-3-4-5-6-7-8-9-10-11-12-17-22-30-28(29)27-25-20-15-13-18-23
InchiKey: AOSHNOANJCAAEP-UHFFFAOYSA-N
Formula: C28H38O2
SMILES: CCCCCCCCCCCCCCOC(=O)C1c2ccccc2-c2ccccc21
Mol. weight [g/mol]: 406.60

Physical Properties

Property code	Value	Unit	Source
gf	241.47	kJ/mol	Joback Method
hf	-330.81	kJ/mol	Joback Method
hfus	60.70	kJ/mol	Joback Method
hvap	92.52	kJ/mol	Joback Method
log10ws	-9.53		Crippen Method
logp	8.043		Crippen Method
mcvol	354.440	ml/mol	McGowan Method
pc	1009.09	kPa	Joback Method
rinpol	2268.00		NIST Webbook
rinpol	2268.00		NIST Webbook
tb	977.85	K	Joback Method
tc	1198.75	K	Joback Method
tf	580.34	K	Joback Method
vc	1.385	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1193.21	J/mol×K	977.85	Joback Method
cpg	1211.69	J/mol×K	1014.67	Joback Method
cpg	1229.26	J/mol×K	1051.48	Joback Method
cpg	1246.04	J/mol×K	1088.30	Joback Method
cpg	1262.16	J/mol×K	1125.12	Joback Method
cpg	1277.74	J/mol×K	1161.93	Joback Method
cpg	1292.91	J/mol×K	1198.75	Joback Method
dvisc	0.0009816	Pa×s	580.34	Joback Method

dvisc	0.0006498	Pa×s	646.59	Joback Method
dvisc	0.0004644	Pa×s	712.84	Joback Method
dvisc	0.0003514	Pa×s	779.10	Joback Method
dvisc	0.0002778	Pa×s	845.35	Joback Method
dvisc	0.0002272	Pa×s	911.60	Joback Method
dvisc	0.0001910	Pa×s	977.85	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U415134&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