Allyl arachidate

Inchi: InChI=1S/C23H44O2/c1-3-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-23(24)25-22
InchiKey: FFJIQMXNDZSTQB-UHFFFAOYSA-N
Formula: C23H44O2
SMILES: C=CCOC(=O)CCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 352.59

Physical Properties

Property code	Value	Unit	Source
gf	-3.30	kJ/mol	Joback Method
hf	-637.42	kJ/mol	Joback Method
hfus	56.83	kJ/mol	Joback Method
hvap	75.28	kJ/mol	Joback Method
log10ws	-8.17		Crippen Method
logp	7.757		Crippen Method
mcvol	338.070	ml/mol	McGowan Method
pc	897.49	kPa	Joback Method
rinpol	2450.00		NIST Webbook
tb	798.61	K	Joback Method
tc	978.82	K	Joback Method
tf	419.37	K	Joback Method
vc	1.329	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1066.41	J/mol×K	798.61	Joback Method
cpg	1086.93	J/mol×K	828.65	Joback Method
cpg	1106.40	J/mol×K	858.68	Joback Method
cpg	1124.85	J/mol×K	888.72	Joback Method
cpg	1142.32	J/mol×K	918.75	Joback Method
cpg	1158.84	J/mol×K	948.79	Joback Method
cpg	1174.45	J/mol×K	978.82	Joback Method
dvisc	0.0011987	Pa×s	419.37	Joback Method
dvisc	0.0005032	Pa×s	482.58	Joback Method

dvisc	0.0002583	Pa×s	545.78	Joback Method
dvisc	0.0001523	Pa×s	608.99	Joback Method
dvisc	0.0000991	Pa×s	672.20	Joback Method
dvisc	0.0000695	Pa×s	735.40	Joback Method
dvisc	0.0000515	Pa×s	798.61	Joback Method

Sources

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

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R541101&Units=SI

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