Cyclohexyl nonadecanoate

Inchi: InChI=1S/C25H48O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-20-23-25(26)27-24-21-18
InchiKey: WQIYPLDSWWUFLK-UHFFFAOYSA-N
Formula: C25H48O2
SMILES: CCCCCCCCCCCCCCCCCCC(=O)OC1CCCCC1
Mol. weight [g/mol]: 380.65

Physical Properties

Property code	Value	Unit	Source
gf	-49.85	kJ/mol	Joback Method
hf	-749.81	kJ/mol	Joback Method
hfus	55.13	kJ/mol	Joback Method
hvap	80.83	kJ/mol	Joback Method
log10ws	-9.16		Crippen Method
logp	8.514		Crippen Method
mcvol	359.690	ml/mol	McGowan Method
pc	882.09	kPa	Joback Method
rinpol	2722.00		NIST Webbook
tb	867.24	K	Joback Method
tc	1062.92	K	Joback Method
tf	451.05	K	Joback Method
vc	1.393	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1220.25	J/mol×K	867.24	Joback Method
cpg	1242.37	J/mol×K	899.85	Joback Method
cpg	1263.08	J/mol×K	932.47	Joback Method
cpg	1282.43	J/mol×K	965.08	Joback Method
cpg	1300.47	J/mol×K	997.70	Joback Method
cpg	1317.25	J/mol×K	1030.31	Joback Method
cpg	1332.82	J/mol×K	1062.92	Joback Method
dvisc	0.0010724	Pa×s	451.05	Joback Method
dvisc	0.0004219	Pa×s	520.41	Joback Method

dvisc	0.0002067	Pa×s	589.78	Joback Method
dvisc	0.0001177	Pa×s	659.14	Joback Method
dvisc	0.0000746	Pa×s	728.51	Joback Method
dvisc	0.0000512	Pa×s	797.88	Joback Method
dvisc	0.0000373	Pa×s	867.24	Joback Method

Sources

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=R541512&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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