1,2-Cyclohexanedicarboxylic acid, 2-ethoxyethyl tetradecyl ester

Inchi: InChI=1S/C26H48O5/c1-3-5-6-7-8-9-10-11-12-13-14-17-20-30-25(27)23-18-15-16-19-24

InchiKey: MIQJCVLIYRYZNZ-UHFFFAOYSA-N

Formula: C26H48O5

SMILES: CCCCCCCCCCCCCCOC(=O)C1CCCCC1C(=O)OCCOCC

Mol. weight [g/mol]: 440.66

Physical Properties

Property code	Value	Unit	Source
gf	-388.06	kJ/mol	Joback Method
hf	-1167.81	kJ/mol	Joback Method
hfus	62.76	kJ/mol	Joback Method
hvap	94.31	kJ/mol	Joback Method
log10ws	-6.93		Crippen Method
logp	6.617		Crippen Method
mcvol	387.090	ml/mol	McGowan Method
pc	831.94	kPa	Joback Method
rinpol	2908.00		NIST Webbook
rinpol	2908.00		NIST Webbook
tb	984.16	K	Joback Method
tc	1207.12	K	Joback Method
tf	552.47	K	Joback Method
vc	1.490	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1377.48	J/mol×K	984.16	Joback Method
cpg	1396.79	J/mol×K	1021.32	Joback Method
cpg	1414.03	J/mol×K	1058.48	Joback Method
cpg	1429.23	J/mol×K	1095.64	Joback Method
cpg	1442.42	J/mol×K	1132.80	Joback Method
cpg	1453.64	J/mol×K	1169.96	Joback Method
cpg	1462.91	J/mol×K	1207.12	Joback Method
dvisc	0.0003493	Pa×s	552.47	Joback Method

dvisc	0.0001685	Pa×s	624.42	Joback Method
dvisc	0.0000945	Pa×s	696.37	Joback Method
dvisc	0.0000591	Pa×s	768.32	Joback Method
dvisc	0.0000400	Pa×s	840.26	Joback Method
dvisc	0.0000288	Pa×s	912.21	Joback Method
dvisc	0.0000218	Pa×s	984.16	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=U339915&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