1,2-Cyclohexanedicarboxylic acid, 2-methoxyethyl octyl ester

Inchi: InChI=1S/C19H34O5/c1-3-4-5-6-7-10-13-23-18(20)16-11-8-9-12-17(16)19(21)24-15-14-2

InchiKey: ZICMEDHZENCCEO-UHFFFAOYSA-N

Formula: C19H34O5

SMILES: CCCCCCCCOC(=O)C1CCCCC1C(=O)OCCOC

Mol. weight [g/mol]: 342.47

Physical Properties

Property code	Value	Unit	Source
gf	-447.00	kJ/mol	Joback Method
hf	-1023.33	kJ/mol	Joback Method
hfus	44.63	kJ/mol	Joback Method
hvap	78.73	kJ/mol	Joback Method
log10ws	-4.00		Crippen Method
logp	3.886		Crippen Method
mcvol	288.460	ml/mol	McGowan Method
pc	1280.08	kPa	Joback Method
rinpol	2331.00		NIST Webbook
tb	824.00	K	Joback Method
tc	1019.70	K	Joback Method
tf	473.58	K	Joback Method
vc	1.097	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	940.27	J/mol×K	824.00	Joback Method
cpg	1019.94	J/mol×K	987.08	Joback Method
cpg	1006.67	J/mol×K	954.47	Joback Method
cpg	992.07	J/mol×K	921.85	Joback Method
cpg	976.14	J/mol×K	889.23	Joback Method
cpg	958.87	J/mol×K	856.62	Joback Method
cpg	1031.88	J/mol×K	1019.70	Joback Method
dvisc	0.0000611	Pa×s	824.00	Joback Method
dvisc	0.0000795	Pa×s	765.60	Joback Method

dvisc	0.0001079	Pa×s	707.19	Joback Method
dvisc	0.0001548	Pa×s	648.79	Joback Method
dvisc	0.0002384	Pa×s	590.39	Joback Method
dvisc	0.0004039	Pa×s	531.98	Joback Method
dvisc	0.0007793	Pa×s	473.58	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=U340030&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