

Cyclohexanecarboxylic acid, 4-methoxy-, decyl ester

Inchi:	InChI=1S/C18H34O3/c1-3-4-5-6-7-8-9-10-15-21-18(19)16-11-13-17(20-2)14-12-16/h16-1
InchiKey:	BINAGPMVIOPJMM-UHFFFAOYSA-N
Formula:	C18H34O3
SMILES:	CCCCCCCCCOC(=O)C1CCC(OC)CC1
Mol. weight [g/mol]:	298.46

Physical Properties

Property code	Value	Unit	Source
gf	-221.50	kJ/mol	Joback Method
hf	-757.89	kJ/mol	Joback Method
hfus	39.26	kJ/mol	Joback Method
hvap	67.35	kJ/mol	Joback Method
log10ws	-5.07		Crippen Method
logp	4.876		Crippen Method
mvol	266.930	ml/mol	McGowan Method
pc	1327.14	kPa	Joback Method
rinpol	2153.00		NIST Webbook
rinpol	2153.00		NIST Webbook
tb	724.83	K	Joback Method
tc	911.92	K	Joback Method
tf	390.15	K	Joback Method
vc	1.018	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	820.95	J/molxK	724.83	Joback Method
cpg	913.55	J/molxK	880.73	Joback Method
cpg	897.28	J/molxK	849.55	Joback Method
cpg	879.90	J/molxK	818.37	Joback Method
cpg	861.39	J/molxK	787.19	Joback Method
cpg	841.74	J/molxK	756.01	Joback Method
cpg	928.72	J/molxK	911.92	Joback Method
dvisc	0.0000941	Paxs	724.83	Joback Method

dvisc	0.0001236	Paxs	669.05	Joback Method
dvisc	0.0001706	Paxs	613.27	Joback Method
dvisc	0.0002512	Paxs	557.49	Joback Method
dvisc	0.0004032	Paxs	501.71	Joback Method
dvisc	0.0007285	Paxs	445.93	Joback Method
dvisc	0.0015586	Paxs	390.15	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=U406198&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

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