1,2-Cyclohexanedicarboxylic acid, di(3,5-dimethylcyclohexyl) ester

Inchi: InChI=1S/C24H40O4/c1-15-9-16(2)12-19(11-15)27-23(25)21-7-5-6-8-22(21)24(26)28-20
InchiKey: WTHSTRVGZOYERL-UHFFFAOYSA-N
Formula: C24H40O4
SMILES: CC1CC(C)CC(OC(=O)C2CCCCC2C(=O)OC2CC(C)CC(C)C2)C1
Mol. weight [g/mol]: 392.57

Physical Properties

Property code	Value	Unit	Source
gf	-281.84	kJ/mol	Joback Method
hf	-967.03	kJ/mol	Joback Method
hfus	44.35	kJ/mol	Joback Method
hvap	87.07	kJ/mol	Joback Method
log10ws	-6.05		Crippen Method
logp	5.529		Crippen Method
mcvol	331.320	ml/mol	McGowan Method
pc	1126.08	kPa	Joback Method
rinpol	2657.00		NIST Webbook
tb	936.40	K	Joback Method
tc	1166.61	K	Joback Method
tf	505.50	K	Joback Method
vc	1.222	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1228.10	J/mol×K	936.40	Joback Method
cpg	1305.84	J/mol×K	1128.24	Joback Method
cpg	1295.47	J/mol×K	1089.87	Joback Method
cpg	1282.52	J/mol×K	1051.50	Joback Method
cpg	1266.99	J/mol×K	1013.14	Joback Method
cpg	1248.85	J/mol×K	974.77	Joback Method
cpg	1313.65	J/mol×K	1166.61	Joback Method
dvisc	0.0001307	Pa×s	936.40	Joback Method
dvisc	0.0001624	Pa×s	864.58	Joback Method

dvisc	0.0002097	Pa×s	792.77	Joback Method
dvisc	0.0002850	Pa×s	720.95	Joback Method
dvisc	0.0004145	Pa×s	649.13	Joback Method
dvisc	0.0006617	Pa×s	577.32	Joback Method
dvisc	0.0012066	Pa×s	505.50	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U339857&Units=SI
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

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