

cis-Cyclohex-4-en-1,2-dicarboxylic acid, hexyl pentyl ester

Inchi:	InChI=1S/C19H32O4/c1-3-5-7-11-15-23-19(21)17-13-9-8-12-16(17)18(20)22-14-10-6-4-2
InchiKey:	KLVYOCASGORHKQ-UHFFFAOYSA-N
Formula:	C19H32O4
SMILES:	CCCCCOC(=O)C1CC=CCC1C(=O)OCCCCC
Mol. weight [g/mol]:	324.45

Physical Properties

Property code	Value	Unit	Source
gf	-312.04	kJ/mol	Joback Method
hf	-833.33	kJ/mol	Joback Method
hfus	44.67	kJ/mol	Joback Method
hvap	76.61	kJ/mol	Joback Method
log10ws	-4.77		Crippen Method
logp	4.426		Crippen Method
mvol	278.290	ml/mol	McGowan Method
pc	1330.04	kPa	Joback Method
rinpol	2190.00		NIST Webbook
rinpol	2190.00		NIST Webbook
tb	800.74	K	Joback Method
tc	996.12	K	Joback Method
tf	452.11	K	Joback Method
vc	1.065	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	881.50	J/molxK	800.74	Joback Method
cpg	899.89	J/molxK	833.30	Joback Method
cpg	917.04	J/molxK	865.87	Joback Method
cpg	932.98	J/molxK	898.43	Joback Method
cpg	947.71	J/molxK	931.00	Joback Method
cpg	961.26	J/molxK	963.56	Joback Method
cpg	973.63	J/molxK	996.12	Joback Method
dvisc	0.0010801	Paxs	452.11	Joback Method

dvisc	0.0005587	Paxs	510.22	Joback Method
dvisc	0.0003307	Paxs	568.32	Joback Method
dvisc	0.0002158	Paxs	626.42	Joback Method
dvisc	0.0001513	Paxs	684.53	Joback Method
dvisc	0.0001122	Paxs	742.63	Joback Method
dvisc	0.0000869	Paxs	800.74	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U382662&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	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:	Log ₁₀ of Water solubility in mol/l
log_p:	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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