

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

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

Physical Properties

Property code	Value	Unit	Source
gf	-314.48	kJ/mol	Joback Method
hf	-838.61	kJ/mol	Joback Method
hfus	41.14	kJ/mol	Joback Method
hvap	76.22	kJ/mol	Joback Method
log10ws	-4.52		Crippen Method
logp	4.282		Crippen Method
mvol	278.290	ml/mol	McGowan Method
pc	1337.84	kPa	Joback Method
rinpol	2143.00		NIST Webbook
rinpol	2143.00		NIST Webbook
tb	800.30	K	Joback Method
tc	997.70	K	Joback Method
tf	437.11	K	Joback Method
vc	1.060	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	881.99	J/molxK	800.30	Joback Method
cpg	962.35	J/molxK	964.80	Joback Method
cpg	948.76	J/molxK	931.90	Joback Method
cpg	933.94	J/molxK	899.00	Joback Method
cpg	917.88	J/molxK	866.10	Joback Method
cpg	900.57	J/molxK	833.20	Joback Method
cpg	974.75	J/molxK	997.70	Joback Method
dvisc	0.0000798	Paxs	800.30	Joback Method

dvisc	0.0001047	Paxs	739.77	Joback Method
dvisc	0.0001442	Paxs	679.24	Joback Method
dvisc	0.0002113	Paxs	618.71	Joback Method
dvisc	0.0003365	Paxs	558.17	Joback Method
dvisc	0.0006002	Paxs	497.64	Joback Method
dvisc	0.0012563	Paxs	437.11	Joback Method

Sources

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=U382807&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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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