

cis-Cyclohex-4-en-1,2-dicarboxylic acid, decyl phenethyl ester

Inchi:	InChI=1S/C26H38O4/c1-2-3-4-5-6-7-8-14-20-29-25(27)23-17-12-13-18-24(23)26(28)30-2
InchiKey:	MDVYGJDYUZPTHX-UHFFFAOYSA-N
Formula:	C26H38O4
SMILES:	CCCCCCCCCOC(=O)C1CC=CCC1C(=O)OCCc1ccccc1
Mol. weight [g/mol]:	414.58

Physical Properties

Property code	Value	Unit	Source
gf	-140.69	kJ/mol	Joback Method
hf	-741.28	kJ/mol	Joback Method
hfus	56.84	kJ/mol	Joback Method
hvap	94.47	kJ/mol	Joback Method
log10ws	-6.80		Crippen Method
logp	6.039		Crippen Method
mvol	353.160	ml/mol	McGowan Method
pc	1052.09	kPa	Joback Method
rinpol	3031.00		NIST Webbook
rinpol	3031.00		NIST Webbook
tb	987.58	K	Joback Method
tc	1210.87	K	Joback Method
tf	557.42	K	Joback Method
vc	1.349	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1212.00	J/molxK	987.58	Joback Method
cpg	1228.33	J/molxK	1024.80	Joback Method
cpg	1242.94	J/molxK	1062.01	Joback Method
cpg	1255.91	J/molxK	1099.23	Joback Method
cpg	1267.28	J/molxK	1136.44	Joback Method
cpg	1277.10	J/molxK	1173.66	Joback Method
cpg	1285.45	J/molxK	1210.87	Joback Method
dvisc	0.0004467	Paxs	557.42	Joback Method

dvisc	0.0002271	Paxs	629.11	Joback Method
dvisc	0.0001326	Paxs	700.81	Joback Method
dvisc	0.0000855	Paxs	772.50	Joback Method
dvisc	0.0000594	Paxs	844.19	Joback Method
dvisc	0.0000437	Paxs	915.89	Joback Method
dvisc	0.0000336	Paxs	987.58	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=U382797&Units=SI

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
logp:	Octanol/Water partition coefficient
m_{cvol}:	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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