

1,2-Cyclohexanedicarboxylic acid, cyclohex-3-enylmethyl undecyl ester

Inchi:	InChI=1S/C26H44O4/c1-2-3-4-5-6-7-8-9-15-20-29-25(27)23-18-13-14-19-24(23)26(28)30
InchiKey:	HOVDZITVMZCHEX-UHFFFAOYSA-N
Formula:	C26H44O4
SMILES:	CCCCCCCCCOC(=O)C1CCCCC1C(=O)OCC1CC=CCC1
Mol. weight [g/mol]:	420.63

Physical Properties

Property code	Value	Unit	Source
gf	-228.65	kJ/mol	Joback Method
hf	-923.49	kJ/mol	Joback Method
hfus	54.63	kJ/mol	Joback Method
hvap	92.62	kJ/mol	Joback Method
log10ws	-7.35		Crippen Method
logp	6.766		Crippen Method
mcvol	366.060	ml/mol	McGowan Method
pc	971.09	kPa	Joback Method
rinpol	3031.00		NIST Webbook
tb	980.45	K	Joback Method
tc	1201.49	K	Joback Method
tf	538.38	K	Joback Method
vc	1.391	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1311.18	J/molxK	980.45	Joback Method
cpg	1384.59	J/molxK	1164.65	Joback Method
cpg	1373.62	J/molxK	1127.81	Joback Method
cpg	1360.84	J/molxK	1090.97	Joback Method
cpg	1346.21	J/molxK	1054.13	Joback Method
cpg	1329.67	J/molxK	1017.29	Joback Method
cpg	1393.81	J/molxK	1201.49	Joback Method
dvisc	0.0000333	Paxs	980.45	Joback Method
dvisc	0.0000442	Paxs	906.77	Joback Method

dvisc	0.0000615	Paxs	833.09	Joback Method
dvisc	0.0000914	Paxs	759.41	Joback Method
dvisc	0.0001479	Paxs	685.74	Joback Method
dvisc	0.0002687	Paxs	612.06	Joback Method
dvisc	0.0005748	Paxs	538.38	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U339873&Units=SI
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

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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