

1,2-Cyclohexanedicarboxylic acid, 5-methoxy-3-methylpentyl undecyl ester

Inchi:	InChI=1S/C26H48O5/c1-4-5-6-7-8-9-10-11-14-19-30-25(27)23-15-12-13-16-24(23)26(28)
InchiKey:	WHCIEAZBSAJJNU-UHFFFAOYSA-N
Formula:	C26H48O5
SMILES:	CCCCCCCCCOC(=O)C1CCCCC1C(=O)OCCC(C)CCOC
Mol. weight [g/mol]:	440.66

Physical Properties

Property code	Value	Unit	Source
gf	-390.50	kJ/mol	Joback Method
hf	-1173.09	kJ/mol	Joback Method
hfus	59.24	kJ/mol	Joback Method
hvap	93.92	kJ/mol	Joback Method
log10ws	-6.69		Crippen Method
logp	6.473		Crippen Method
mvol	387.090	ml/mol	McGowan Method
pc	835.79	kPa	Joback Method
rinpol	2973.00		NIST Webbook
rinpol	2973.00		NIST Webbook
tb	983.72	K	Joback Method
tc	1205.82	K	Joback Method
tf	537.47	K	Joback Method
vc	1.484	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1377.81	J/molxK	983.72	Joback Method
cpg	1397.00	J/molxK	1020.74	Joback Method
cpg	1414.12	J/molxK	1057.75	Joback Method
cpg	1429.20	J/molxK	1094.77	Joback Method
cpg	1442.28	J/molxK	1131.79	Joback Method
cpg	1453.39	J/molxK	1168.81	Joback Method
cpg	1462.55	J/molxK	1205.82	Joback Method
dvisc	0.0003910	Paxs	537.47	Joback Method

dvisc	0.0001759	Paxs	611.85	Joback Method
dvisc	0.0000941	Paxs	686.22	Joback Method
dvisc	0.0000569	Paxs	760.60	Joback Method
dvisc	0.0000376	Paxs	834.97	Joback Method
dvisc	0.0000266	Paxs	909.35	Joback Method
dvisc	0.0000198	Paxs	983.72	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U339923&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.cheméo.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
h_{vap}:	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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