Glutaric acid, 1-(cyclohex-2-enyl)hex-3-yl cyclohexylmethyl ester

Inchi: InChI=1S/C24H40O4/c1-2-10-22(18-17-20-11-5-3-6-12-20)28-24(26)16-9-15-23(25)27-1

InchiKey: GUDZARSKLUBCKR-UHFFFAOYSA-N

Formula: C24H40O4

SMILES: CCCC(CCC1C=CCCC1)OC(=O)CCCC(=O)OCC1CCCCC1

Mol. weight [g/mol]: 392.57

Physical Properties

Property code	Value	Unit	Source
gf	-240.22	kJ/mol	Joback Method
hf	-867.15	kJ/mol	Joback Method
hfus	44.86	kJ/mol	Joback Method
hvap	88.09	kJ/mol	Joback Method
log10ws	-6.87		Crippen Method
logp	6.129		Crippen Method
mcvol	337.880	ml/mol	McGowan Method
pc	1129.10	kPa	Joback Method
rinpol	2813.00		NIST Webbook
rinpol	2813.00		NIST Webbook
tb	938.92	K	Joback Method
tc	1156.52	K	Joback Method
tf	505.08	K	Joback Method
vc	1.274	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1181.65	J/mol×K	938.92	Joback Method
cpg	1200.24	J/mol×K	975.19	Joback Method
cpg	1217.06	J/mol×K	1011.45	Joback Method
cpg	1232.13	J/mol×K	1047.72	Joback Method
cpg	1245.52	J/mol×K	1083.99	Joback Method
cpg	1257.27	J/mol×K	1120.25	Joback Method
cpg	1267.43	J/mol×K	1156.52	Joback Method
dvisc	0.0007566	Pa×s	505.08	Joback Method

dvisc	0.0003179	Pa×s	577.39	Joback Method
dvisc	0.0001620	Pa×s	649.69	Joback Method
dvisc	0.0000945	Pa×s	722.00	Joback Method
dvisc	0.0000608	Pa×s	794.31	Joback Method
dvisc	0.0000421	Pa×s	866.61	Joback Method
dvisc	0.0000309	Pa×s	938.92	Joback Method

Sources

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=U405518&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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