

Glutaric acid, dodecyl tetrahydrofurfuryl ester

Inchi:	InChI=1S/C22H40O5/c1-2-3-4-5-6-7-8-9-10-11-17-26-21(23)15-12-16-22(24)27-19-20-14
InchiKey:	WILVXCOCWZMSSZ-UHFFFAOYSA-N
Formula:	C22H40O5
SMILES:	CCCCCCCCCCCCOC(=O)CCCC(=O)OCC1CCCO1
Mol. weight [g/mol]:	384.55

Physical Properties

Property code	Value	Unit	Source
gf	-383.05	kJ/mol	Joback Method
hf	-1058.53	kJ/mol	Joback Method
hfus	60.22	kJ/mol	Joback Method
hvap	87.64	kJ/mol	Joback Method
log10ws	-5.85		Crippen Method
logp	5.343		Crippen Method
mvol	330.730	ml/mol	McGowan Method
pc	1063.10	kPa	Joback Method
rinpol	2835.00		NIST Webbook
tb	897.57	K	Joback Method
tc	1099.61	K	Joback Method
tf	519.49	K	Joback Method
vc	1.278	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1120.29	J/molxK	897.57	Joback Method
cpg	1138.72	J/molxK	931.24	Joback Method
cpg	1155.80	J/molxK	964.92	Joback Method
cpg	1171.55	J/molxK	998.59	Joback Method
cpg	1186.02	J/molxK	1032.26	Joback Method
cpg	1199.25	J/molxK	1065.94	Joback Method
cpg	1211.25	J/molxK	1099.61	Joback Method
dvisc	0.0007076	Paxs	519.49	Joback Method
dvisc	0.0003592	Paxs	582.50	Joback Method

dvisc	0.0002081	Paxs	645.52	Joback Method
dvisc	0.0001329	Paxs	708.53	Joback Method
dvisc	0.0000913	Paxs	771.54	Joback Method
dvisc	0.0000664	Paxs	834.56	Joback Method
dvisc	0.0000505	Paxs	897.57	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359668&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

Latest version available from:

<https://www.chemeo.com/cid/39-972-0/Glutaric-acid-dodecyl-tetrahydrofurfuryl-ester.pdf>

Generated by Cheméo on 2024-04-27 09:20:29.588481885 +0000 UTC m=+16498878.509059207.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.