

Glutaric acid, 2-methylpent-3-yl oct-3-en-2-yl ester

Inchi:	InChI=1S/C19H34O4/c1-6-8-9-10-12-16(5)22-18(20)13-11-14-19(21)23-17(7-2)15(3)4/h
InchiKey:	ROXDACKKEZWZEK-ZRDIBKRKSA-N
Formula:	C19H34O4
SMILES:	CCCCC=CC(C)OC(=O)CCCC(=O)OC(CC)C(C)C
Mol. weight [g/mol]:	326.47

Physical Properties

Property code	Value	Unit	Source
gf	-285.84	kJ/mol	Joback Method
hf	-823.71	kJ/mol	Joback Method
hfus	40.17	kJ/mol	Joback Method
hvap	74.99	kJ/mol	Joback Method
log10ws	-5.34		Crippen Method
logp	4.813		Crippen Method
mcvol	289.150	ml/mol	McGowan Method
pc	1210.67	kPa	Joback Method
rinpol	2018.00		NIST Webbook
rinpol	2018.00		NIST Webbook
tb	789.54	K	Joback Method
tc	977.44	K	Joback Method
tf	398.13	K	Joback Method
vc	1.109	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	885.58	J/molxK	789.54	Joback Method
cpg	903.25	J/molxK	820.86	Joback Method
cpg	919.91	J/molxK	852.17	Joback Method
cpg	935.58	J/molxK	883.49	Joback Method
cpg	950.29	J/molxK	914.81	Joback Method
cpg	964.06	J/molxK	946.12	Joback Method
cpg	976.92	J/molxK	977.44	Joback Method
dvisc	0.0015838	Paxs	398.13	Joback Method

dvisc	0.0005628	Paxs	463.37	Joback Method
dvisc	0.0002582	Paxs	528.60	Joback Method
dvisc	0.0001406	Paxs	593.84	Joback Method
dvisc	0.0000863	Paxs	659.07	Joback Method
dvisc	0.0000579	Paxs	724.31	Joback Method
dvisc	0.0000415	Paxs	789.54	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U393986&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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/82-062-2/Glutaric-acid-2-methylpent-3-yl-oct-3-en-2-yl-ester.pdf>

Generated by Cheméo on 2024-04-23 14:34:11.896959607 +0000 UTC m=+16172100.817536929.

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