

Glutaric acid, non-5-yn-3-yl pentyl ester

Inchi:	InChI=1S/C19H32O4/c1-4-7-9-10-13-17(6-3)23-19(21)15-12-14-18(20)22-16-11-8-5-2/h
InchiKey:	LQAYQLITLFDEFR-UHFFFAOYSA-N
Formula:	C19H32O4
SMILES:	CCCC#CCC(CC)OC(=O)CCCC(=O)OCCCCC
Mol. weight [g/mol]:	324.45

Physical Properties

Property code	Value	Unit	Source
gf	-158.38	kJ/mol	Joback Method
hf	-658.07	kJ/mol	Joback Method
hfus	50.14	kJ/mol	Joback Method
hvap	77.96	kJ/mol	Joback Method
log10ws	-5.41		Crippen Method
logp	4.405		Crippen Method
mcvol	284.850	ml/mol	McGowan Method
pc	1292.07	kPa	Joback Method
rinqol	2208.00		NIST Webbook
tb	795.26	K	Joback Method
tc	986.26	K	Joback Method
tf	539.31	K	Joback Method
vc	1.103	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	860.94	J/molxK	795.26	Joback Method
cpg	878.11	J/molxK	827.09	Joback Method
cpg	894.26	J/molxK	858.93	Joback Method
cpg	909.41	J/molxK	890.76	Joback Method
cpg	923.58	J/molxK	922.59	Joback Method
cpg	936.78	J/molxK	954.42	Joback Method
cpg	949.02	J/molxK	986.26	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359801&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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
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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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