

Glutaric acid, 2-methyloct-5-yn-4-yl octyl ester

Inchi:	InChI=1S/C22H38O4/c1-5-7-9-10-11-12-17-25-21(23)15-13-16-22(24)26-20(14-8-6-2)18
InchiKey:	CCFHMEBEKKYVJZ-UHFFFAOYSA-N
Formula:	C22H38O4
SMILES:	CCC#CC(CC(C)C)OC(=O)CCCC(=O)OCCCCCCCC
Mol. weight [g/mol]:	366.53

Physical Properties

Property code	Value	Unit	Source
gf	-135.56	kJ/mol	Joback Method
hf	-725.27	kJ/mol	Joback Method
hfus	54.39	kJ/mol	Joback Method
hvap	84.25	kJ/mol	Joback Method
log10ws	-6.42		Crippen Method
logp	5.432		Crippen Method
mvol	327.120	ml/mol	McGowan Method
pc	1066.57	kPa	Joback Method
rinpol	3503.00		NIST Webbook
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tb	863.46	K	Joback Method
tc	1060.75	K	Joback Method
tf	558.12	K	Joback Method
vc	1.266	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1041.86	J/molxK	863.46	Joback Method
cpg	1059.98	J/molxK	896.34	Joback Method
cpg	1076.90	J/molxK	929.22	Joback Method
cpg	1092.63	J/molxK	962.11	Joback Method
cpg	1107.20	J/molxK	994.99	Joback Method
cpg	1120.63	J/molxK	1027.87	Joback Method
cpg	1132.95	J/molxK	1060.75	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U359605&Units=SI

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
hvp:	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
rinp:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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