

Glutaric acid, tridec-2-yn-1-yl 2-methylpentyl ester

Inchi:	InChI=1S/C24H42O4/c1-4-6-7-8-9-10-11-12-13-14-15-20-27-23(25)18-16-19-24(26)28-2
InchiKey:	ZMMVJQNGFSYSOV-UHFFFAOYSA-N
Formula:	C24H42O4
SMILES:	CCCCCCCCC#CCOC(=O)CCCC(=O)OCC(C)CCC
Mol. weight [g/mol]:	394.59

Physical Properties

Property code	Value	Unit	Source
gf	-116.28	kJ/mol	Joback Method
hf	-761.27	kJ/mol	Joback Method
hfus	63.09	kJ/mol	Joback Method
hvap	89.09	kJ/mol	Joback Method
log10ws	-7.15		Crippen Method
logp	6.213		Crippen Method
mcvol	355.300	ml/mol	McGowan Method
pc	939.79	kPa	Joback Method
rinsol	2743.00		NIST Webbook
tb	909.66	K	Joback Method
tc	1113.76	K	Joback Method
tf	595.66	K	Joback Method
vc	1.383	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1165.20	J/molxK	909.66	Joback Method
cpg	1183.91	J/molxK	943.68	Joback Method
cpg	1201.29	J/molxK	977.69	Joback Method
cpg	1217.35	J/molxK	1011.71	Joback Method
cpg	1232.13	J/molxK	1045.73	Joback Method
cpg	1245.66	J/molxK	1079.74	Joback Method
cpg	1257.97	J/molxK	1113.76	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U391718&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
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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