

N-[Tris(methyloxymethyl)methyl]-N-methylglycine

Other names: Tricine, O, O', O'', O''', N-pentamethyl

methyl ester

2-[1,3-Dimethyloxy-2-(methyloxymethyl)propan-2-yl(methylamino)]acetic acid,
methyl ester
Methyl 2-([1,3-dimethoxy-2-(methoxymethyl)propan-2-yl](methyl)amino)acetate

Methyl 2-([1,3-dimethoxy-2-(methoxymethyl)propan-2-yl](methyl)amino)acetate

Inchi: InChI=1S/C11H23NO5/c1-12(6-10(13)17-5)11(7-14-2,8-15-3)9-16-4/h6-9H2,1-5H3

InchiKey: BEZUVPGMSKGRSA-UHFFFAOYSA-N

Formula: C11H23NO5

SMILES: COCC(COC)(COC)N(C)CC(=O)OC

Mol. weight [g/mol]: 249.30

Physical Properties

Property code	Value	Unit	Source
gf	-393.56	kJ/mol	Joback Method
hf	-853.05	kJ/mol	Joback Method
hfus	26.20	kJ/mol	Joback Method
hvap	57.21	kJ/mol	Joback Method
log10ws	0.77		Crippen Method
logp	-0.231		Crippen Method
mcvol	200.880	ml/mol	McGowan Method
pc	1954.41	kPa	Joback Method
rinpol	1510.00		NIST Webbook
tb	603.84	K	Joback Method
tc	780.45	K	Joback Method
tf	387.47	K	Joback Method
vc	0.737	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	537.34	J/molxK	603.84	Joback Method
cpg	552.89	J/molxK	633.27	Joback Method
cpg	567.76	J/molxK	662.71	Joback Method
cpg	581.95	J/molxK	692.14	Joback Method
cpg	595.45	J/molxK	721.58	Joback Method

cpg	608.27	J/mol×K	751.01	Joback Method
cpg	620.40	J/mol×K	780.45	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U378710&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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
hvac:	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

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