Methyl 2-(2,2-dimethyl-1,3-dioxolan-4-yl)-2-(ethoxycarbon

Inchi: InChI=1S/C11H18O7/c1-5-15-10(13)17-8(9(12)14-4)7-6-16-11(2,3)18-7/h7-8H,5-6H2,1-4

InchiKey: PFDRISXRXLHFOY-UHFFFAOYSA-N

Formula: C11H18O7

SMILES: CCOC(=O)OC(C(=O)OC)C1COC(C)(C)O1

Mol. weight [g/mol]: 262.26

Physical Properties

Property code	Value	Unit	Source
gf	-682.43	kJ/mol	Joback Method
hf	-1106.09	kJ/mol	Joback Method
hfus	32.15	kJ/mol	Joback Method
hvap	68.23	kJ/mol	Joback Method
log10ws	-1.12		Crippen Method
logp	0.853		Crippen Method
mcvol	187.480	ml/mol	McGowan Method
pc	2458.04	kPa	Joback Method
rinpol	1527.00		NIST Webbook
tb	690.39	K	Joback Method
tc	897.65	K	Joback Method
tf	448.98	K	Joback Method
vc	0.692	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	542.64	J/mol×K	690.39	Joback Method
cpg	557.63	J/mol×K	724.93	Joback Method
cpg	571.94	J/mol×K	759.48	Joback Method
cpg	585.61	J/mol×K	794.02	Joback Method
cpg	598.72	J/mol×K	828.56	Joback Method
cpg	611.31	J/mol×K	863.11	Joback Method
cpg	623.44	J/mol×K	897.65	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=U373807&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
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

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