

# 2-Propenoic acid, 3-(4-hydroxy-3-methoxyphenyl)-, 2,3-dihydroxypropyl ester, (2E)-

Other names:

Glyceryl ferulate

Inchi: InChI=1S/C13H16O6/c1-18-12-6-9(2-4-11(12)16)3-5-13(17)19-8-10(15)7-14/h2-6,10,14-

InchiKey: QXRAHTFDPBQKIM-HWKANZROSA-N

Formula: C13H16O6

SMILES: COc1cc(C=CC(=O)OCC(O)CO)ccc1O

Mol. weight [g/mol]: 268.26

CAS: 120601-69-6

## Physical Properties

Property code	Value	Unit	Source
gf	-528.04	kJ/mol	Joback Method
hf	-833.44	kJ/mol	Joback Method
hfus	37.69	kJ/mol	Joback Method
hvap	104.98	kJ/mol	Joback Method
log10ws	-1.14		Crippen Method
logp	0.310		Crippen Method
mcvol	196.890	ml/mol	McGowan Method
pc	3348.98	kPa	Joback Method
rinpol	2522.70		NIST Webbook
rinpol	2522.70		NIST Webbook
tb	895.91	K	Joback Method
tc	1104.89	K	Joback Method
tf	582.88	K	Joback Method
vc	0.675	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	596.68	J/molxK	895.91	Joback Method
cpg	640.94	J/molxK	1070.06	Joback Method
cpg	632.75	J/molxK	1035.23	Joback Method
cpg	624.28	J/molxK	1000.40	Joback Method
cpg	615.48	J/molxK	965.57	Joback Method
cpg	606.30	J/molxK	930.74	Joback Method

cpg	648.92	J/molxK	1104.89	Joback Method
dvisc	0.0000001	Paxs	895.91	Joback Method
dvisc	0.0000002	Paxs	843.74	Joback Method
dvisc	0.0000003	Paxs	791.57	Joback Method
dvisc	0.0000007	Paxs	739.39	Joback Method
dvisc	0.0000016	Paxs	687.22	Joback Method
dvisc	0.0000042	Paxs	635.05	Joback Method
dvisc	0.0000128	Paxs	582.88	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C120601696&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C120601696&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.cheméo.com/doc/models/crippen_log10ws">https://www.cheméo.com/doc/models/crippen_log10ws</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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