

# Fumaric acid, 2,4,6-trichlorophenyl but-3-yn-2-yl ester

**Inchi:** InChI=1S/C14H9Cl3O4/c1-3-8(2)20-12(18)4-5-13(19)21-14-10(16)6-9(15)7-11(14)17/h1,  
**InchiKey:** OYOKCQOUIWZIOI-SNAWJCMRSA-N  
**Formula:** C14H9Cl3O4  
**SMILES:** C#CC(C)OC(=O)C=CC(=O)Oc1c(Cl)cc(Cl)cc1Cl  
**Mol. weight [g/mol]:** 347.58

## Physical Properties

Property code	Value	Unit	Source
gf	-52.26	kJ/mol	Joback Method
hf	-263.15	kJ/mol	Joback Method
hfus	42.71	kJ/mol	Joback Method
hvap	81.92	kJ/mol	Joback Method
log10ws	-4.97		Crippen Method
logp	3.673		Crippen Method
mvol	223.060	ml/mol	McGowan Method
pc	2295.91	kPa	Joback Method
rinpol	2155.00		NIST Webbook
rinpol	2155.00		NIST Webbook
tb	820.05	K	Joback Method
tc	1059.44	K	Joback Method
tf	572.49	K	Joback Method
vc	0.843	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	530.24	J/mol×K	820.05	Joback Method
cpg	539.66	J/mol×K	859.95	Joback Method
cpg	548.21	J/mol×K	899.85	Joback Method
cpg	555.94	J/mol×K	939.75	Joback Method
cpg	562.85	J/mol×K	979.64	Joback Method
cpg	568.99	J/mol×K	1019.54	Joback Method
cpg	574.38	J/mol×K	1059.44	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=U405948&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405948&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</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>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>hvp:</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>rlnol:</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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