

# Fumaric acid, 3,5-dimethylphenyl 2,2,3,3-tetrafluoropropyl ester

<b>Inchi:</b>	InChI=1S/C15H14F4O4/c1-9-5-10(2)7-11(6-9)23-13(21)4-3-12(20)22-8-15(18,19)14(16)
<b>InchiKey:</b>	UFTUQPATWXOULM-ONEGZZNKSA-N
<b>Formula:</b>	C15H14F4O4
<b>SMILES:</b>	<chem>Cc1cc(C)cc(OC(=O)C=CC(=O)OCC(F)(F)C(F)F)c1</chem>
<b>Mol. weight [g/mol]:</b>	334.26

## Physical Properties

Property code	Value	Unit	Source
gf	-997.89	kJ/mol	Joback Method
hf	-1310.19	kJ/mol	Joback Method
hfus	35.03	kJ/mol	Joback Method
hvap	65.90	kJ/mol	Joback Method
log10ws	-4.17		Crippen Method
logp	3.209		Crippen Method
mvol	216.110	ml/mol	McGowan Method
pc	1786.37	kPa	Joback Method
rinpol	1841.00		NIST Webbook
rinpol	1841.00		NIST Webbook
tb	729.39	K	Joback Method
tc	923.77	K	Joback Method
tf	439.29	K	Joback Method
vc	0.851	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	602.99	J/molxK	729.39	Joback Method
cpg	615.42	J/molxK	761.79	Joback Method
cpg	627.02	J/molxK	794.18	Joback Method
cpg	637.82	J/molxK	826.58	Joback Method
cpg	647.84	J/molxK	858.98	Joback Method
cpg	657.14	J/molxK	891.37	Joback Method
cpg	665.72	J/molxK	923.77	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=U405735&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U405735&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.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.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>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>rinpola:</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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