

# Cinnamic aldehyde, PFBO # 1

**Inchi:** InChI=1S/C16H10F5NO/c17-12-11(13(18)15(20)16(21)14(12)19)9-23-22-8-4-7-10-5-2-1  
**InchiKey:** LIDMFHBBTNZNCB-YEQYMXEUSA-N  
**Formula:** C16H10F5NO  
**SMILES:** Fc1c(F)c(F)c(CON=CC=Cc2ccccc2)c(F)c1F  
**Mol. weight [g/mol]:** 327.25

## Physical Properties

Property code	Value	Unit	Source
hf	-871.19	kJ/mol	Joback Method
hvap	60.67	kJ/mol	Joback Method
log10ws	-6.14		Crippen Method
logp	4.598		Crippen Method
mcvol	204.880	ml/mol	McGowan Method
pc	1649.77	kPa	Joback Method
rinpol	1974.00		NIST Webbook
ripol	2735.00		NIST Webbook
ripol	2735.00		NIST Webbook
tb	743.35	K	Joback Method
tc	950.32	K	Joback Method

## Sources

**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>  
**NIST Webbook:** <http://webbook.nist.gov/cgi/cbook.cgi?ID=R575327&Units=SI>  
**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci990307I>  
**Crippen Method:** [https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)  
**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

## Legend

**hf:** Enthalpy of formation at standard conditions

<b>h<sub>vap</sub>:</b>	Enthalpy of vaporization at standard conditions
<b>log<sub>10</sub>w<sub>s</sub>:</b>	Log <sub>10</sub> of Water solubility in mol/l
<b>log<sub>p</sub>:</b>	Octanol/Water partition coefficient
<b>m<sub>cvol</sub>:</b>	McGowan's characteristic volume
<b>p<sub>c</sub>:</b>	Critical Pressure
<b>r<sub>inpol</sub>:</b>	Non-polar retention indices
<b>r<sub>ipol</sub>:</b>	Polar retention indices
<b>t<sub>b</sub>:</b>	Normal Boiling Point Temperature
<b>t<sub>c</sub>:</b>	Critical Temperature

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