

# Butanal, PFBO # 1

**Inchi:** InChI=1S/C11H10F5NO/c1-2-3-4-17-18-5-6-7(12)9(14)11(16)10(15)8(6)13/h4H,2-3,5H2,  
**InchiKey:** MDJOICYRBFIIYJJ-UHFFFAOYSA-N  
**Formula:** C11H10F5NO  
**SMILES:** CCCC=NOCc1c(F)c(F)c(F)c(F)c1F  
**Mol. weight [g/mol]:** 267.20

## Physical Properties

Property code	Value	Unit	Source
hf	-1121.74	kJ/mol	Joback Method
hvap	47.31	kJ/mol	Joback Method
log10ws	-4.93		Crippen Method
logp	3.685		Crippen Method
mcvol	162.490	ml/mol	McGowan Method
pc	1787.88	kPa	Joback Method
rinpol	1271.00		NIST Webbook
rinpol	1271.00		NIST Webbook
ripol	1572.00		NIST Webbook
tb	598.11	K	Joback Method
tc	776.27	K	Joback Method

## Sources

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>  
**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)  
**McGowan Method:** <http://link.springer.com/article/10.1007/BF02311772>  
**NIST Webbook:** <http://webbook.nist.gov/cgi/cbook.cgi?ID=R575307&Units=SI>

## 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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