

# Silvex, PFB ester

<b>Other names:</b>	2,4,5-TP PFB ester Fenoprop, PFB
<b>Inchi:</b>	InChI=1S/C16H8Cl3F5O3/c1-5(27-10-3-8(18)7(17)2-9(10)19)16(25)26-4-6-11(20)13(22)
<b>InchiKey:</b>	ITZPCMBEXLNDBH-UHFFFAOYSA-N
<b>Formula:</b>	C16H8Cl3F5O3
<b>SMILES:</b>	CC(Oc1cc(Cl)c(Cl)cc1Cl)C(=O)OCc1c(F)c(F)c(F)c(F)c1F
<b>Mol. weight [g/mol]:</b>	449.58

## Physical Properties

Property code	Value	Unit	Source
gf	-1119.58	kJ/mol	Joback Method
hf	-1402.34	kJ/mol	Joback Method
hfus	50.61	kJ/mol	Joback Method
hvap	81.31	kJ/mol	Joback Method
log10ws	-7.64		Crippen Method
logp	5.853		Crippen Method
mcvol	247.660	ml/mol	McGowan Method
pc	1586.01	kPa	Joback Method
rinpol	2179.00		NIST Webbook
rinpol	2170.00		NIST Webbook
rinpol	2173.00		NIST Webbook
rinpol	2170.00		NIST Webbook
rinpol	2173.00		NIST Webbook
ripol	2902.00		NIST Webbook
ripol	2902.00		NIST Webbook
ripol	2936.00		NIST Webbook
ripol	2936.00		NIST Webbook
ripol	2902.00		NIST Webbook
tb	865.59	K	Joback Method
tc	1077.20	K	Joback Method
tf	595.18	K	Joback Method
vc	0.989	m <sup>3</sup> /kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	641.24	J/molxK	865.59	Joback Method
cpg	650.12	J/molxK	900.86	Joback Method
cpg	658.08	J/molxK	936.13	Joback Method
cpg	665.11	J/molxK	971.39	Joback Method
cpg	671.21	J/molxK	1006.66	Joback Method
cpg	676.37	J/molxK	1041.93	Joback Method
cpg	680.58	J/molxK	1077.20	Joback Method

## Sources

<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R14014&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R14014&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>
<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>

## 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>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	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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