

# 4-Fluoro-3-trifluoromethylbenzoic acid, octadecyl ester

<b>Inchi:</b>	InChI=1S/C26H40F4O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-20-32-25(31)22-18
<b>InchiKey:</b>	ZPIDVMSDCQGACP-UHFFFAOYSA-N
<b>Formula:</b>	C26H40F4O2
<b>SMILES:</b>	CCCCCCCCCCCCCCCCCOC(=O)c1ccc(F)c(C(F)(F)F)c1
<b>Mol. weight [g/mol]:</b>	460.59

## Physical Properties

Property code	Value	Unit	Source
gf	-749.13	kJ/mol	Joback Method
hf	-1404.37	kJ/mol	Joback Method
hfus	64.05	kJ/mol	Joback Method
hvap	81.66	kJ/mol	Joback Method
log10ws	-10.27		Crippen Method
logp	9.263		Crippen Method
mvol	367.960	ml/mol	McGowan Method
pc	803.42	kPa	Joback Method
rinpol	2719.00		NIST Webbook
rinpol	2719.00		NIST Webbook
tb	901.06	K	Joback Method
tc	1104.09	K	Joback Method
tf	511.18	K	Joback Method
vc	1.468	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1220.85	J/mol×K	901.06	Joback Method
cpg	1239.98	J/mol×K	934.90	Joback Method
cpg	1257.87	J/mol×K	968.74	Joback Method
cpg	1274.59	J/mol×K	1002.57	Joback Method
cpg	1290.21	J/mol×K	1036.41	Joback Method
cpg	1304.80	J/mol×K	1070.25	Joback Method
cpg	1318.43	J/mol×K	1104.09	Joback Method

# Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U338930&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U338930&amp;Units=SI</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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