

# [4-(4-Trifluoroacetoxy-5-tert-butyl-2-methylphenyl)

Other names: 4,4'-Thiobis(2-tert-butyl-1-hydroxy-5-methylphenyl), bistrifluoroacetate  
trifluoroacetate Thiobis-2-tert-butyl-5-methyl-4,1-phenylene bis(trifluoroacetate)

**Inchi:** InChI=1S/C26H28F6O4S/c1-13-9-17(35-21(33)25(27,28)29)15(23(3,4)5)11-19(13)37-20  
**InchiKey:** IDGHOYVDCDSOQP-UHFFFAOYSA-N  
**Formula:** C26H28F6O4S  
**SMILES:** Cc1cc(OC(=O)C(F)(F)F)c(C(C)(C)C)cc1Sc1cc(C(C)(C)C)c(OC(=O)C(F)(F)F)cc1C  
**Mol. weight [g/mol]:** 550.55

## Physical Properties

Property code	Value	Unit	Source
gf	-1257.14	kJ/mol	Joback Method
hf	-1835.12	kJ/mol	Joback Method
hfus	47.37	kJ/mol	Joback Method
hvap	97.04	kJ/mol	Joback Method
log10ws	-9.42		Crippen Method
logp	7.985		Crippen Method
mcvol	371.530	ml/mol	McGowan Method
pc	960.29	kPa	Joback Method
rinpol	2217.00		NIST Webbook
rinpol	2217.00		NIST Webbook
tb	1081.58	K	Joback Method
tc	1324.25	K	Joback Method
tf	702.68	K	Joback Method
vc	1.442	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1222.68	J/molxK	1081.58	Joback Method
cpg	1234.44	J/molxK	1122.03	Joback Method
cpg	1245.20	J/molxK	1162.47	Joback Method
cpg	1255.11	J/molxK	1202.92	Joback Method
cpg	1264.31	J/molxK	1243.36	Joback Method
cpg	1272.94	J/molxK	1283.81	Joback Method

## Sources

<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=U373408&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U373408&amp;Units=SI</a>
<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>

## 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>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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