

# 2,6-di-tert-Butyl-4-(dimethylaminomethyl)phenol

**Other names:**

Phenol, 4-[(dimethylamino)methyl]-2,6-bis(1,1-dimethylethyl)-  
p-Cresol, 2,6-di-tert-butyl-«alpha»-(dimethylamino)-  
Ethyl 703  
N-(3,5-Di-tert-butyl-4-hydroxybenzyl)dimethylamine  
2,6-Di-tert-butyl-«alpha»-(dimethylamino)-p-cresol  
Agidol 3  
Ethyl antioxidant 703  
F 1  
OMI  
2,6-Di-tert-butyl-alpha-dimethylamino-p-cresol  
2,6-Di-t-butyl-4-(dimethylaminomethyl)phenol  
F 1 (Antioxidant)  
NSC 27823

**Inchi:** InChI=1S/C17H29NO/c1-16(2,3)13-9-12(11-18(7)8)10-14(15(13)19)17(4,5)6/h9-10,19H,1**InchiKey:** VMZVBRIIHDRYGK-UHFFFAOYSA-N**Formula:** C17H29NO**SMILES:** CN(C)Cc1cc(C(C)(C)C)c(O)c(C(C)(C)C)c1**Mol. weight [g/mol]:** 263.42**CAS:** 88-27-7

## Physical Properties

Property code	Value	Unit	Source
gf	147.25	kJ/mol	Joback Method
hf	-307.90	kJ/mol	Joback Method
hfus	27.03	kJ/mol	Joback Method
hvap	69.50	kJ/mol	Joback Method
log10ws	-3.93		Crippen Method
logp	4.049		Crippen Method
mcvol	242.480	ml/mol	McGowan Method
pc	1789.39	kPa	Joback Method
tb	711.60	K	Joback Method
tc	927.62	K	Joback Method
tf	481.84	K	Joback Method
vc	0.842	m <sup>3</sup> /kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	710.40	J/mol×K	711.60	Joback Method
cpg	728.95	J/mol×K	747.60	Joback Method
cpg	746.39	J/mol×K	783.61	Joback Method
cpg	762.83	J/mol×K	819.61	Joback Method
cpg	778.43	J/mol×K	855.62	Joback Method
cpg	793.31	J/mol×K	891.62	Joback Method
cpg	807.61	J/mol×K	927.62	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=C88277&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C88277&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>

## 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>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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