

# 5H-Tribenzo[a,f,k]trindene, 10,15-dihydro-

<b>Other names:</b>	«alpha»-Truxene Benzene, tribenzylene- Truxen Truxene 5H-Diindeno(1,2-a:1',2'-c)fluorene, 10,15-dihydro- 10,15-Dihydro-5H-diindeno[1,2-a:1,2-c]fluorene 10,15-Dihydro-5h-diindeno-[1,2-a;1',2'-c]fluorene 10,15-dihydro-5H-tribenzo[a,f,k]triindene
<b>Inchi:</b>	InChI=1S/C27H18/c1-4-10-19-16(7-1)13-22-25(19)23-14-17-8-3-6-12-21(17)27(23)24-15
<b>InchiKey:</b>	YGPLLMPPZRUGTJ-UHFFFAOYSA-N
<b>Formula:</b>	C27H18
<b>SMILES:</b>	<chem>c1ccc2c(c1)Cc1c-2c2c(c3c1-c1cccc1C3)-c1cccc1C2</chem>
<b>Mol. weight [g/mol]:</b>	342.43
<b>CAS:</b>	548-35-6

## Physical Properties

Property code	Value	Unit	Source
gf	827.04	kJ/mol	Joback Method
hf	570.13	kJ/mol	Joback Method
hfus	42.53	kJ/mol	Joback Method
hvap	89.73	kJ/mol	Joback Method
log10ws	-10.32		Crippen Method
logp	6.400		Crippen Method
mcvol	263.670	ml/mol	McGowan Method
pc	1945.79	kPa	Joback Method
tb	972.33	K	Joback Method
tc	1241.01	K	Joback Method
tf	687.55	K	Joback Method
vc	1.038	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	811.09	J/molxK	972.33	Joback Method

cpg	829.56	J/molxK	1017.11	Joback Method
cpg	848.94	J/molxK	1061.89	Joback Method
cpg	869.64	J/molxK	1106.67	Joback Method
cpg	892.08	J/molxK	1151.45	Joback Method
cpg	916.67	J/molxK	1196.23	Joback Method
cpg	943.84	J/molxK	1241.01	Joback Method
dvisc	0.0108372	Paxs	687.55	Joback Method
dvisc	0.0103482	Paxs	735.01	Joback Method
dvisc	0.0099367	Paxs	782.48	Joback Method
dvisc	0.0095859	Paxs	829.94	Joback Method
dvisc	0.0092836	Paxs	877.40	Joback Method
dvisc	0.0090204	Paxs	924.87	Joback Method
dvisc	0.0087893	Paxs	972.33	Joback Method

## Sources

<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=C548356&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C548356&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>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<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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