

# Decane, 1,10-bis(4'-benzoylphenyl)-

<b>Inchi:</b>	InChI=1S/C36H38O2/c37-35(31-17-11-7-12-18-31)33-25-21-29(22-26-33)15-9-5-3-1-2-4
<b>InchiKey:</b>	GNZAKMXBPIQUAW-UHFFFAOYSA-N
<b>Formula:</b>	C36H38O2
<b>SMILES:</b>	O=C(c1ccccc1)c1ccc(CCCCCCCCCc2ccc(C(=O)c3ccccc3)cc2)cc1
<b>Mol. weight [g/mol]:</b>	502.69
<b>CAS:</b>	31948-18-2

## Physical Properties

Property code	Value	Unit	Source
gf	424.78	kJ/mol	Joback Method
hf	-88.35	kJ/mol	Joback Method
hfus	67.58	kJ/mol	Joback Method
hvap	119.65	kJ/mol	Joback Method
log10ws	-11.15		Crippen Method
logp	9.055		Crippen Method
mvol	426.200	ml/mol	McGowan Method
pc	944.42	kPa	Joback Method
tb	1247.50	K	Joback Method
tc	1527.76	K	Joback Method
tf	726.06	K	Joback Method
vc	1.631	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1475.15	J/molxK	1247.50	Joback Method
cpg	1490.17	J/molxK	1294.21	Joback Method
cpg	1504.60	J/molxK	1340.92	Joback Method
cpg	1518.72	J/molxK	1387.63	Joback Method
cpg	1532.80	J/molxK	1434.34	Joback Method
cpg	1547.11	J/molxK	1481.05	Joback Method
cpg	1561.93	J/molxK	1527.76	Joback Method
dvisc	0.0001211	Paxs	726.06	Joback Method
dvisc	0.0000650	Paxs	812.97	Joback Method

dvisc	0.0000394	Paxs	899.87	Joback Method
dvisc	0.0000260	Paxs	986.78	Joback Method
dvisc	0.0000184	Paxs	1073.69	Joback Method
dvisc	0.0000137	Paxs	1160.59	Joback Method
dvisc	0.0000106	Paxs	1247.50	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=C31948182&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C31948182&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>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>mccvol:</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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