

Benzene, 1,1'-(1,4-dimethyl-1-butene-1,4-diyl)bis-

Other names:	2,5-Diphenyl-2-hexene 2-Hexene, 2,5-diphenyl- (1-Methyl-4-phenyl-3-pentenyl)benzene
Inchi:	InChI=1S/C18H20/c1-15(17-9-5-3-6-10-17)13-14-16(2)18-11-7-4-8-12-18/h3-13,16H,14H
InchiKey:	BWCDHPVLWVSYKC-FYWRMAATSA-N
Formula:	C18H20
SMILES:	CC(=CCC(C)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	236.35
CAS:	52161-54-3

Physical Properties

Property code	Value	Unit	Source
gf	394.73	kJ/mol	Joback Method
hf	160.36	kJ/mol	Joback Method
hfus	25.83	kJ/mol	Joback Method
hvap	59.86	kJ/mol	Joback Method
log10ws	-5.55		Crippen Method
logp	5.284		Crippen Method
mcvol	212.660	ml/mol	McGowan Method
pc	2030.89	kPa	Joback Method
tb	668.20	K	Joback Method
tc	907.56	K	Joback Method
tf	311.42	K	Joback Method
vc	0.802	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	556.15	J/mol×K	668.20	Joback Method
cpg	575.62	J/mol×K	708.09	Joback Method
cpg	593.63	J/mol×K	747.99	Joback Method
cpg	610.27	J/mol×K	787.88	Joback Method
cpg	625.66	J/mol×K	827.77	Joback Method
cpg	639.92	J/mol×K	867.66	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C52161543&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/76-070-0/Benzene-1-1-1-4-dimethyl-1-butene-1-4-diyl-bis.pdf>

Generated by Cheméo on 2025-12-05 12:47:14.56383329 +0000 UTC m=+4687032.093873943.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.