2-Pentene, 4-methyl-2,4-diphenyl-

Other names: Benzene, 1,1'-(1,3,3-trimethyl-1-propene-1,3-diyl)bis-
2,4-Diphenyl-4-methyl-2-pentene
[1,1-Dimethyl-3-phenyl-2-butenyl]benzene
NSC 54387
1,3-Dimethyl-1,3-diphenyl-1-butene
1,1'-(1,3,3-trimethylprop-1-ene-1,3-diyl)dibenzene

Inchi: InChI=1S/C18H20/c1-15(16-10-6-4-7-11-16)14-18(2,3)17-12-8-5-9-13-17/h4-14H,1-3H3/

InchiKey: VOOVDZMAQQVAEW-PFONDFGASA-N

Formula: C18H20

SMILES: CC(=CC(C)(C)c1ccccc1)c1ccccc1

Mol. weight [g/mol]: 236.35

CAS: 6258-73-7

Physical Properties

Property code	Value	Unit	Source
gf	400.01	kJ/mol	Joback Method
hf	156.89	kJ/mol	Joback Method
hfus	21.94	kJ/mol	Joback Method
hvap	58.96	kJ/mol	Joback Method
log10ws	-5.26		Crippen Method
logp	5.068		Crippen Method
mcvol	212.660	ml/mol	McGowan Method
pc	2051.17	kPa	Joback Method
rinpol	1826.00		NIST Webbook
rinpol	1826.00		NIST Webbook
tb	665.41	K	Joback Method
tc	914.25	K	Joback Method
tf	328.84	K	Joback Method
vc	0.797	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.41	J/mol×K	665.41	Joback Method

cpg	578.36	J/mol×K	706.88	Joback Method
cpg	596.66	J/mol×K	748.36	Joback Method
cpg	613.47	J/mol×K	789.83	Joback Method
cpg	628.95	J/mol×K	831.30	Joback Method
cpg	643.25	J/mol×K	872.77	Joback Method
cpg	656.55	J/mol×K	914.25	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6258737&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume