Benzene, (4-methyl-4-pentenyl)-

Other names:	1-Pentene, 2-methyl-5-phenyl-
	(4-methyl-4-pentenyl)benzene
Inchi:	InChI=1S/C12H16/c1-11(2)7-6-10-12-8-4-3-5-9-12/h3-5,8-9H,1,6-7,10H2,2H3
InchiKey:	BHQHBBJBGWFXRM-UHFFFAOYSA-N
Formula:	C12H16
SMILES:	C=C(C)CCCc1ccccc1
Mol. weight [g/mol]:	160.26
CAS:	6683-49-4

Physical Properties

Property code	Value	Unit	Source
gf	241.86	kJ/mol	Joback Method
hf	61.16	kJ/mol	Joback Method
hfus	18.29	kJ/mol	Joback Method
hvap	43.99	kJ/mol	Joback Method
log10ws	-3.80		Crippen Method
logp	3.585		Crippen Method
mcvol	151.880	ml/mol	McGowan Method
pc	2520.12	kPa	Joback Method
tb	497.20	K	Joback Method
tc	704.60	K	Joback Method
tf	235.70	K	Joback Method
vc	0.582	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	327.11	J/mol×K	497.20	Joback Method
cpg	343.69	J/mol×K	531.77	Joback Method
cpg	359.30	J/mol×K	566.33	Joback Method
cpg	373.99	J/mol×K	600.90	Joback Method
cpg	387.80	J/mol×K	635.47	Joback Method
cpg	400.78	J/mol×K	670.03	Joback Method
cpg	412.97	J/mol×K	704.60	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6683494&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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