

Benzene, (2-methyl-2-propenyl)-

Other names:	Benzene, (2-methylallyl)- «beta»-Methylallylbenzene (2-Methylallyl)benzene Methallylbenzene 1-Propene, 2-(phenylmethyl)- 1-Propene, 2-methyl-3-phenyl- 2-Methyl-3-phenylpropene 3-Phenyl-2-methylpropene 2-Methyl-3-phenyl-1-propene
Inchi:	InChI=1S/C10H12/c1-9(2)8-10-6-4-3-5-7-10/h3-7H,1,8H2,2H3
InchiKey:	MXTNFIYGTWARIN-UHFFFAOYSA-N
Formula:	C10H12
SMILES:	<chem>C=C(C)Cc1ccccc1</chem>
Mol. weight [g/mol]:	132.20
CAS:	3290-53-7

Physical Properties

Property code	Value	Unit	Source
gf	225.02	kJ/mol	Joback Method
hf	102.44	kJ/mol	Joback Method
hfus	13.11	kJ/mol	Joback Method
hvap	39.54	kJ/mol	Joback Method
log10ws	-2.97		Crippen Method
logp	2.805		Crippen Method
mcvol	123.700	ml/mol	McGowan Method
pc	3086.42	kPa	Joback Method
rinpol	1022.40		NIST Webbook
rinpol	1014.00		NIST Webbook
rinpol	1014.00		NIST Webbook
tb	451.44	K	Joback Method
tc	664.84	K	Joback Method
tf	213.16	K	Joback Method
vc	0.469	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.63	J/mol×K	451.44	Joback Method
cpg	254.37	J/mol×K	487.01	Joback Method
cpg	268.22	J/mol×K	522.57	Joback Method
cpg	281.21	J/mol×K	558.14	Joback Method
cpg	293.39	J/mol×K	593.71	Joback Method
cpg	304.80	J/mol×K	629.28	Joback Method
cpg	315.48	J/mol×K	664.84	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=C3290537&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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