

Benzene, (1-methyl-3-butenyl)-

Other names:	1-Pentene, 4-phenyl- 4-Phenyl-1-pentene
Inchi:	InChI=1S/C11H14/c1-3-7-10(2)11-8-5-4-6-9-11/h3-6,8-10H,1,7H2,2H3
InchiKey:	VUXTURSVFKUIRT-UHFFFAOYSA-N
Formula:	C11H14
SMILES:	C=CCC(C)c1ccccc1
Mol. weight [g/mol]:	146.23
CAS:	10340-49-5

Physical Properties

Property code	Value	Unit	Source
gf	239.55	kJ/mol	Joback Method
hf	86.31	kJ/mol	Joback Method
hfus	13.48	kJ/mol	Joback Method
hvap	41.30	kJ/mol	Joback Method
log10ws	-3.35		Crippen Method
logp	3.366		Crippen Method
mvol	137.790	ml/mol	McGowan Method
pc	2790.61	kPa	Joback Method
tb	474.00	K	Joback Method
tc	685.20	K	Joback Method
tf	223.39	K	Joback Method
vc	0.518	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.66	J/molxK	474.00	Joback Method
cpg	298.57	J/molxK	509.20	Joback Method
cpg	313.54	J/molxK	544.40	Joback Method
cpg	327.59	J/molxK	579.60	Joback Method
cpg	340.77	J/molxK	614.80	Joback Method
cpg	353.13	J/molxK	650.00	Joback Method
cpg	364.71	J/molxK	685.20	Joback Method

dvisc	0.0051264	Paxs	223.39	Joback Method
dvisc	0.0019756	Paxs	265.16	Joback Method
dvisc	0.0009869	Paxs	306.93	Joback Method
dvisc	0.0005822	Paxs	348.69	Joback Method
dvisc	0.0003845	Paxs	390.46	Joback Method
dvisc	0.0002751	Paxs	432.23	Joback Method
dvisc	0.0002089	Paxs	474.00	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C10340495&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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

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