Benzene, (2-methyl-3-butenyl)-

Other names: 3-Methyl-4-phenyl-1-butene
Inchi: InChI=1S/C11H14/c1-3-10(2)9-11-7-5-4-6-8-11/h3-8,10H,1,9H2,2H3
InchiKey: SNPJDWADMNXVRG-UHFFFAOYSA-N
Formula: C11H14
SMILES: C=CC(C)Cc1ccccc1
Mol. weight [g/mol]: 146.23
CAS: 1647-06-9

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	-3.14		Crippen Method
logp	3.051		Crippen Method
mcvol	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	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.66	J/mol×K	474.00	Joback Method
cpg	353.13	J/mol×K	650.00	Joback Method
cpg	340.77	J/mol×K	614.80	Joback Method
cpg	327.59	J/mol×K	579.60	Joback Method
cpg	313.54	J/mol×K	544.40	Joback Method
cpg	298.57	J/mol×K	509.20	Joback Method
cpg	364.71	J/mol×K	685.20	Joback Method
dvisc	0.0002089	Pa×s	474.00	Joback Method

dvisc	0.0002751	Pa×s	432.23	Joback Method
dvisc	0.0003845	Pa×s	390.46	Joback Method
dvisc	0.0005822	Pa×s	348.69	Joback Method
dvisc	0.0009869	Pa×s	306.93	Joback Method
dvisc	0.0019756	Pa×s	265.16	Joback Method
dvisc	0.0051264	Pa×s	223.39	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1647069&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
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