Benzene, (2-methyl-1-methylenepropyl)-

Other names: «alpha»-isopropylstyrene
Inchi: InChI=1S/C11H14/c1-9(2)10(3)11-7-5-4-6-8-11/h4-9H,3H2,1-2H3
InchiKey: POZGETMIPGBFGQ-UHFFFAOYSA-N
Formula: C11H14
SMILES: C=C(c1ccccc1)C(C)C
Mol. weight [g/mol]: 146.23
CAS: 17498-71-4

Physical Properties

Property code	Value	Unit	Source
gf	231.00	kJ/mol	Joback Method
hf	76.52	kJ/mol	Joback Method
hfus	12.17	kJ/mol	Joback Method
hvap	53.30 ± 0.30	kJ/mol	NIST Webbook
log10ws	-3.31		Crippen Method
logp	3.356		Crippen Method
mcvol	137.790	ml/mol	McGowan Method
pc	2805.41	kPa	Joback Method
tb	465.15 ± 2.00	K	NIST Webbook
tc	689.29	K	Joback Method
tf	209.43	K	Joback Method
vc	0.519	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.55	J/mol×K	473.88	Joback Method
cpg	298.74	J/mol×K	509.78	Joback Method
cpg	313.94	J/mol×K	545.68	Joback Method
cpg	328.19	J/mol×K	581.58	Joback Method
cpg	341.55	J/mol×K	617.48	Joback Method
cpg	354.06	J/mol×K	653.38	Joback Method
cpg	365.76	J/mol×K	689.29	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17498714&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

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