(1,4-Dimethylpent-2-enyl)benzene

Inchi: InChI=1S/C13H18/c1-11(2)9-10-12(3)13-7-5-4-6-8-13/h4-12H,1-3H3/b10-9+
InchiKey: VKZZGLZQWTWKTP-MDZDMXLPSA-N
Formula: C13H18
SMILES: CC(C)C=CC(C)c1ccccc1
Mol. weight [g/mol]: 174.28

Physical Properties

Property code	Value	Unit	Source
gf	246.33	kJ/mol	Joback Method
hf	31.54	kJ/mol	Joback Method
hfus	16.62	kJ/mol	Joback Method
hvap	45.99	kJ/mol	Joback Method
log10ws	-3.94		Crippen Method
logp	4.002		Crippen Method
mcvol	165.970	ml/mol	McGowan Method
pc	2340.56	kPa	Joback Method
rinpol	1293.00		NIST Webbook
rinpol	1293.00		NIST Webbook
tb	526.80	K	Joback Method
tc	741.62	K	Joback Method
tf	227.61	K	Joback Method
vc	0.624	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	375.58	J/mol×K	526.80	Joback Method
cpg	393.73	J/mol×K	562.60	Joback Method
cpg	410.74	J/mol×K	598.41	Joback Method
cpg	426.69	J/mol×K	634.21	Joback Method
cpg	441.61	J/mol×K	670.01	Joback Method
cpg	455.59	J/mol×K	705.82	Joback Method
cpg	468.67	J/mol×K	741.62	Joback Method
dvisc	0.0083154	Pa×s	227.61	Joback Method

dvisc	0.0023145	Pa×s	277.48	Joback Method
dvisc	0.0009511	Pa×s	327.34	Joback Method
dvisc	0.0004945	Pa×s	377.20	Joback Method
dvisc	0.0002995	Pa×s	427.07	Joback Method
dvisc	0.0002014	Pa×s	476.93	Joback Method
dvisc	0.0001461	Pa×s	526.80	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=U184979&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
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume