1,4-diphenyl-1-butene

Inchi: InChI=1S/C17H18/c1-15(17-13-6-3-7-14-17)9-8-12-16-10-4-2-5-11-16/h2-8,10-15H,9H2,
InchiKey: KKSPSCQACIDIMM-XYOKQWHBSA-N
Formula: C17H18
SMILES: CC(CC=Cc1ccccc1)c1ccccc1
Mol. weight [g/mol]: 222.32

Physical Properties

Property code	Value	Unit	Source
gf	394.86	kJ/mol	Joback Method
hf	190.79	kJ/mol	Joback Method
hfus	24.55	kJ/mol	Joback Method
hvap	57.56	kJ/mol	Joback Method
log10ws	-5.13		Crippen Method
logp	4.894		Crippen Method
mcvol	198.570	ml/mol	McGowan Method
pc	2208.29	kPa	Joback Method
rinpol	1731.10		NIST Webbook
rinpol	1734.10		NIST Webbook
rinpol	1731.10		NIST Webbook
tb	645.44	K	Joback Method
tc	885.65	K	Joback Method
tf	314.11	K	Joback Method
vc	0.746	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	503.60	J/mol×K	645.44	Joback Method
cpg	584.77	J/mol×K	845.62	Joback Method
cpg	571.01	J/mol×K	805.58	Joback Method
cpg	556.13	J/mol×K	765.55	Joback Method
cpg	540.01	J/mol×K	725.51	Joback Method
cpg	522.53	J/mol×K	685.48	Joback Method
cpg	597.51	J/mol×K	885.65	Joback Method

dvisc	0.0001092	Pa×s	645.44	Joback Method
dvisc	0.0001457	Pa×s	590.22	Joback Method
dvisc	0.0002065	Pa×s	535.00	Joback Method
dvisc	0.0003170	Pa×s	479.78	Joback Method
dvisc	0.0005439	Pa×s	424.55	Joback Method
dvisc	0.0010970	Pa×s	369.33	Joback Method
dvisc	0.0028316	Pa×s	314.11	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R316059&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
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