2,3-diphenyl-1-butene

Inchi: InChI=1S/C16H16/c1-13(15-9-5-3-6-10-15)14(2)16-11-7-4-8-12-16/h3-12,14H,1H2,2H3
InchiKey: YDLBGKXKYRMYHL-UHFFFAOYSA-N
Formula: C16H16
SMILES: C=C(c1ccccc1)C(C)c1ccccc1
Mol. weight [g/mol]: 208.30

Physical Properties

Property code	Value	Unit	Source
gf	385.51	kJ/mol	Joback Method
hf	209.85	kJ/mol	Joback Method
hfus	19.17	kJ/mol	Joback Method
hvap	54.78	kJ/mol	Joback Method
log10ws	-4.71		Crippen Method
logp	4.503		Crippen Method
mcvol	184.480	ml/mol	McGowan Method
pc	2410.00	kPa	Joback Method
rinpol	1610.40		NIST Webbook
rinpol	1610.40		NIST Webbook
tb	614.96	K	Joback Method
tc	859.57	K	Joback Method
tf	292.20	K	Joback Method
vc	0.692	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	450.87	J/mol×K	614.96	Joback Method
cpg	469.71	J/mol×K	655.73	Joback Method
cpg	487.07	J/mol×K	696.50	Joback Method
cpg	503.03	J/mol×K	737.26	Joback Method
cpg	517.71	J/mol×K	778.03	Joback Method
cpg	531.21	J/mol×K	818.80	Joback Method
cpg	543.62	J/mol×K	859.57	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R316277&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume