2,3-diphenyl-1-pentene

Inchi: InChI=1S/C17H18/c1-3-17(16-12-8-5-9-13-16)14(2)15-10-6-4-7-11-15/h4-13,17H,2-3H2,
InchiKey: RUEOYVZKUDGCDW-UHFFFAOYSA-N
Formula: C17H18
SMILES: C=C(c1ccccc1)C(CC)c1ccccc1
Mol. weight [g/mol]: 222.32

Physical Properties

Property code	Value	Unit	Source
gf	393.93	kJ/mol	Joback Method
hf	189.21	kJ/mol	Joback Method
hfus	21.76	kJ/mol	Joback Method
hvap	57.01	kJ/mol	Joback Method
log10ws	-5.13		Crippen Method
logp	4.894		Crippen Method
mcvol	198.570	ml/mol	McGowan Method
pc	2197.95	kPa	Joback Method
rinpol	1827.20		NIST Webbook
tb	637.84	K	Joback Method
tc	877.23	K	Joback Method
tf	303.47	K	Joback Method
vc	0.748	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	502.27	J/mol×K	637.84	Joback Method
cpg	521.45	J/mol×K	677.74	Joback Method
cpg	539.16	J/mol×K	717.64	Joback Method
cpg	555.50	J/mol×K	757.54	Joback Method
cpg	570.57	J/mol×K	797.43	Joback Method
cpg	584.46	J/mol×K	837.33	Joback Method
cpg	597.29	J/mol×K	877.23	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R316282&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
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