2,5-diphenyl-1-pentene

Inchi: InChI=1S/C17H18/c1-15(17-13-6-3-7-14-17)9-8-12-16-10-4-2-5-11-16/h2-7,10-11,13-14H
InchiKey: GCIYECAFBPPBRX-UHFFFAOYSA-N
Formula: C17H18
SMILES: C=C(CCCc1ccccc1)c1ccccc1
Mol. weight [g/mol]: 222.32

Physical Properties

Property code	Value	Unit	Source
gf	396.37	kJ/mol	Joback Method
hf	194.49	kJ/mol	Joback Method
hfus	25.28	kJ/mol	Joback Method
hvap	57.40	kJ/mol	Joback Method
log10ws	-5.17		Crippen Method
logp	4.723		Crippen Method
mcvol	198.570	ml/mol	McGowan Method
pc	2181.56	kPa	Joback Method
rinpol	1900.00		NIST Webbook
rinpol	1900.00		NIST Webbook
tb	638.28	K	Joback Method
tc	872.65	K	Joback Method
tf	318.47	K	Joback Method
vc	0.753	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	501.83	J/mol×K	638.28	Joback Method
cpg	520.56	J/mol×K	677.34	Joback Method
cpg	537.90	J/mol×K	716.40	Joback Method
cpg	553.94	J/mol×K	755.47	Joback Method
cpg	568.76	J/mol×K	794.53	Joback Method
cpg	582.47	J/mol×K	833.59	Joback Method
cpg	595.15	J/mol×K	872.65	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R316326&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