Hexane, 3,4-diphenyl-

Inchi: InChI=1S/C18H22/c1-3-17(15-11-7-5-8-12-15)18(4-2)16-13-9-6-10-14-16/h5-14,17-18H,3
InchiKey: JTJWVUQPSOFEPZ-UHFFFAOYSA-N
Formula: C18H22
SMILES: CCC(c1ccccc1)C(CC)c1ccccc1
Mol. weight [g/mol]: 238.37
CAS: 5789-31-1

Physical Properties

Property code	Value	Unit	Source
gf	320.62	kJ/mol	Joback Method
hf	47.65	kJ/mol	Joback Method
hfus	23.41	kJ/mol	Joback Method
hvap	59.44	kJ/mol	Joback Method
log10ws	-5.49		Crippen Method
logp	5.374		Crippen Method
mcvol	216.960	ml/mol	McGowan Method
pc	1944.08	kPa	Joback Method
tb	571.00 ± 5.00	K	NIST Webbook
tc	894.23	K	Joback Method
tf	365.00 ± 4.00	K	NIST Webbook
vc	0.816	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	578.75	J/mol×K	663.72	Joback Method
cpg	598.84	J/mol×K	702.14	Joback Method
cpg	617.48	J/mol×K	740.56	Joback Method
cpg	634.76	J/mol×K	778.98	Joback Method
cpg	650.76	J/mol×K	817.40	Joback Method
cpg	665.57	J/mol×K	855.81	Joback Method
cpg	679.28	J/mol×K	894.23	Joback Method
dvisc	0.0037813	Pa×s	315.46	Joback Method
dvisc	0.0013126	Pa×s	373.50	Joback Method

dvisc	0.0006057	Pa×s	431.55	Joback Method
dvisc	0.0003357	Pa×s	489.59	Joback Method
dvisc	0.0002109	Pa×s	547.63	Joback Method
dvisc	0.0001448	Pa×s	605.68	Joback Method
dvisc	0.0001062	Pa×s	663.72	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5789311&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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