

Benzene, 1,1'-(2-pentene-1,5-diyl)bis-

Other names:	1,5-diphenyl-2-pentene
Inchi:	InChI=1S/C17H18/c1-4-10-16(11-5-1)14-8-3-9-15-17-12-6-2-7-13-17/h1-8,10-13H,9,14-1
InchiKey:	JGOZVYDIWQEWAS-FPYGCLRLSA-N
Formula:	C17H18
SMILES:	<chem>C(=CCc1ccccc1)CCc1ccccc1</chem>
Mol. weight [g/mol]:	222.32
CAS:	40939-59-1

Physical Properties

Property code	Value	Unit	Source
gf	397.30	kJ/mol	Joback Method
hf	196.07	kJ/mol	Joback Method
hfus	28.07	kJ/mol	Joback Method
hvap	57.95	kJ/mol	Joback Method
log10ws	-5.00		Crippen Method
logp	4.418		Crippen Method
mcvol	198.570	ml/mol	McGowan Method
pc	2191.78	kPa	Joback Method
tb	645.88	K	Joback Method
tc	881.08	K	Joback Method
tf	329.11	K	Joback Method
vc	0.751	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	503.14	J/molxK	645.88	Joback Method
cpg	582.79	J/molxK	841.88	Joback Method
cpg	569.23	J/molxK	802.68	Joback Method
cpg	554.58	J/molxK	763.48	Joback Method
cpg	538.75	J/molxK	724.28	Joback Method
cpg	521.64	J/molxK	685.08	Joback Method
cpg	595.39	J/molxK	881.08	Joback Method
dvisc	0.0001175	Paxs	645.88	Joback Method

dvisc	0.0001538	Paxs	593.09	Joback Method
dvisc	0.0002122	Paxs	540.29	Joback Method
dvisc	0.0003140	Paxs	487.50	Joback Method
dvisc	0.0005110	Paxs	434.70	Joback Method
dvisc	0.0009512	Paxs	381.91	Joback Method
dvisc	0.0021617	Paxs	329.11	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C40939591&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
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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