

Benzene, 1,1'-(1-ethenyl-1,3-propanediyl)bis-

Other names:	3,5-Diphenyl-1-pentene
Inchi:	InChI=1S/C17H18/c1-2-16(17-11-7-4-8-12-17)14-13-15-9-5-3-6-10-15/h2-12,16H,1,13-14
InchiKey:	CNHSYMXTPGADKW-UHFFFAOYSA-N
Formula:	C17H18
SMILES:	<chem>C=CC(CCCc1ccccc1)c1ccccc1</chem>
Mol. weight [g/mol]:	222.32
CAS:	61141-97-7

Physical Properties

Property code	Value	Unit	Source
gf	402.48	kJ/mol	Joback Method
hf	199.00	kJ/mol	Joback Method
hfus	23.07	kJ/mol	Joback Method
hvap	56.93	kJ/mol	Joback Method
log10ws	-4.96		Crippen Method
logp	4.589		Crippen Method
mcvol	198.570	ml/mol	McGowan Method
pc	2187.68	kPa	Joback Method
rinpol	1713.60		NIST Webbook
rinpol	1713.60		NIST Webbook
rinpol	1713.60		NIST Webbook
rinpol	1713.60		NIST Webbook
tb	637.96	K	Joback Method
tc	873.12	K	Joback Method
tf	317.43	K	Joback Method
vc	0.747	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	502.54	J/molxK	637.96	Joback Method
cpg	521.42	J/molxK	677.15	Joback Method
cpg	538.88	J/molxK	716.35	Joback Method
cpg	555.00	J/molxK	755.54	Joback Method

cpg	569.89	J/molxK	794.74	Joback Method
cpg	583.63	J/molxK	833.93	Joback Method
cpg	596.33	J/molxK	873.12	Joback Method
dvisc	0.0029069	Paxs	317.43	Joback Method
dvisc	0.0011995	Paxs	370.85	Joback Method
dvisc	0.0006185	Paxs	424.27	Joback Method
dvisc	0.0003699	Paxs	477.70	Joback Method
dvisc	0.0002453	Paxs	531.12	Joback Method
dvisc	0.0001753	Paxs	584.54	Joback Method
dvisc	0.0001326	Paxs	637.96	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61141977&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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