Benzene, 1,1'-(2-butene-1,4-diyl)bis-

Inchi: InChI=1S/C16H16/c1-3-9-15(10-4-1)13-7-8-14-16-11-5-2-6-12-16/h1-12H,13-14H2/b8-7+
InchiKey: CTYOBVWQEXIGRQ-BQYQJAHWSA-N
Formula: C16H16
SMILES: C(=CCc1ccccc1)Cc1ccccc1
Mol. weight [g/mol]: 208.30
CAS: 13657-49-3

Physical Properties

Property code	Value	Unit	Source
gf	388.88	kJ/mol	Joback Method
hf	216.71	kJ/mol	Joback Method
hfus	25.48	kJ/mol	Joback Method
hvap	55.72	kJ/mol	Joback Method
log10ws	-4.58		Crippen Method
logp	4.028		Crippen Method
mcvol	184.480	ml/mol	McGowan Method
pc	2402.92	kPa	Joback Method
rinpol	1800.00		NIST Webbook
rinpol	1731.60		NIST Webbook
tb	623.00	K	Joback Method
tc	863.17	K	Joback Method
tf	318.40 ± 2.00	K	NIST Webbook
vc	0.696	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	451.62	J/mol×K	623.00	Joback Method
cpg	469.78	J/mol×K	663.03	Joback Method
cpg	486.53	J/mol×K	703.06	Joback Method
cpg	501.97	J/mol×K	743.09	Joback Method
cpg	516.22	J/mol×K	783.11	Joback Method
cpg	529.37	J/mol×K	823.14	Joback Method
cpg	541.54	J/mol×K	863.17	Joback Method

dvisc	0.0022682	Pa×s	317.84	Joback Method
dvisc	0.0010118	Pa×s	368.70	Joback Method
dvisc	0.0005489	Pa×s	419.56	Joback Method
dvisc	0.0003399	Pa×s	470.42	Joback Method
dvisc	0.0002311	Pa×s	521.28	Joback Method
dvisc	0.0001683	Pa×s	572.14	Joback Method
dvisc	0.0001290	Pa×s	623.00	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=C13657493&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