Benzene, 1,1'-(bromomethylene)bis-

Other names:	Methane, bromodiphenyl-
	«alpha»-Bromodiphenylmethane
	Benzhydryl bromide
	Bromodiphenylmethane
	Diphenylbromomethane
	Diphenylmethyl bromide
	UN 1770
	NSC 39226
Inchi:	InChI=1S/C13H11Br/c14-13(11-7-3-1-4-8-11)12-9-5-2-6-10-12/h1-10,13H
InchiKey:	OQROAIRCEOBYJA-UHFFFAOYSA-N
Formula:	C13H11Br
SMILES:	BrC(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	247.13
CAS:	776-74-9

Physical Properties

Property code	Value	Unit	Source
gf	295.28	kJ/mol	Joback Method
hf	182.46	kJ/mol	Joback Method
hfus	19.27	kJ/mol	Joback Method
hvap	55.13	kJ/mol	Joback Method
log10ws	-4.46		Crippen Method
logp	4.171		Crippen Method
mcvol	164.010	ml/mol	McGowan Method
pc	3352.86	kPa	Joback Method
rinpol	1593.00		NIST Webbook
tb	615.92	K	Joback Method
tc	880.26	K	Joback Method
tf	318.00	K	NIST Webbook
vc	0.604	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	364.81	J/mol×K	615.92	Joback Method
cpg	380.54	J/mol×K	659.98	Joback Method
cpg	394.83	J/mol×K	704.03	Joback Method
cpg	407.81	J/mol×K	748.09	Joback Method
cpg	419.60	J/mol×K	792.14	Joback Method
cpg	430.30	J/mol×K	836.20	Joback Method
cpg	440.04	J/mol×K	880.26	Joback Method
dvisc	0.0025360	Pa×s	333.91	Joback Method
dvisc	0.0012456	Pa×s	380.91	Joback Method
dvisc	0.0007152	Pa×s	427.91	Joback Method
dvisc	0.0004583	Pa×s	474.91	Joback Method
dvisc	0.0003182	Pa×s	521.92	Joback Method
dvisc	0.0002347	Pa×s	568.92	Joback Method
dvisc	0.0001813	Pa×s	615.92	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	457.20	K	2.70	NIST Webbook
tbrp	425.70	K	0.30	NIST Webbook
tbrp	457.00	K	2.70	NIST Webbook
tbrp	425.50 ± 2.50	K	0.30	NIST Webbook

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=C776749&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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume