Benzene, 1,1',1''-(bromomethylidyne)tris-

Other names:	Methane, bromotriphenyl-
	«alpha»-Bromotriphenylmethane
	Bromotriphenylmethane
	Triphenylmethyl bromide
	Trityl bromide
	2-bromo-1,1,1-triphenylethane
Inchi:	InChI=1S/C19H15Br/c20-19(16-10-4-1-5-11-16,17-12-6-2-7-13-17)18-14-8-3-9-15-18/h1-
InchiKey:	NZHXEWZGTQSYJM-UHFFFAOYSA-N
Formula:	C19H15Br
SMILES:	BrC(c1ccccc1)(c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	323.23
CAS:	596-43-0

Physical Properties

Property code	Value	Unit	Source
gf	463.49	kJ/mol	Joback Method
hf	291.68	kJ/mol	Joback Method
hfus	24.96	kJ/mol	Joback Method
hvap	69.86	kJ/mol	Joback Method
log10ws	-5.89		Crippen Method
logp	5.373		Crippen Method
mcvol	224.790	ml/mol	McGowan Method
pc	2600.43	kPa	Joback Method
tb	777.09	K	Joback Method
tc	1066.21	K	Joback Method
tf	445.37	K	Joback Method
vc	0.827	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	590.04	J/mol×K	777.09	Joback Method
cpg	606.61	J/mol×K	825.28	Joback Method
cpg	621.49	J/mol×K	873.46	Joback Method

cpg	634.96	J/mol×K	921.65	Joback Method
cpg	647.28	J/mol×K	969.84	Joback Method
cpg	658.71	J/mol×K	1018.02	Joback Method
cpg	669.52	J/mol×K	1066.21	Joback Method
dvisc	0.0010809	Pa×s	445.37	Joback Method
dvisc	0.0005500	Pa×s	500.66	Joback Method
dvisc	0.0003201	Pa×s	555.94	Joback Method
dvisc	0.0002055	Pa×s	611.23	Joback Method
dvisc	0.0001419	Pa×s	666.52	Joback Method
dvisc	0.0001038	Pa×s	721.80	Joback Method
dvisc	0.0000793	Pa×s	777.09	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	503.20	K	2.00	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=C596430&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
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume