Benzene, 2,4-dibromo-1,3,5-trimethyl-

Other names:	2,4-Dibromomesitylene
	2,4-dibromo-1,3,5-trimethylbenzene
	Mesitylene, 2,4-dibromo-
Inchi:	InChI=1S/C9H10Br2/c1-5-4-6(2)9(11)7(3)8(5)10/h4H,1-3H3
InchiKey:	CIHJFEWFZJQTFE-UHFFFAOYSA-N
Formula:	C9H10Br2
SMILES:	Cc1cc(C)c(Br)c(C)c1Br
Mol. weight [g/mol]:	277.98
CAS:	6942-99-0

Physical Properties

Property code	Value	Unit	Source
gf	127.43	kJ/mol	Joback Method
hf	14.22	kJ/mol	Joback Method
hfus	22.12	kJ/mol	Joback Method
hvap	53.42	kJ/mol	Joback Method
log10ws	-5.22		Crippen Method
logp	4.137		Crippen Method
mcvol	148.910	ml/mol	McGowan Method
pc	3572.80	kPa	Joback Method
tb	551.70	K	NIST Webbook
tc	828.34	K	Joback Method
tf	387.29	K	Joback Method
vc	0.555	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	286.74	J/mol×K	584.24	Joback Method
cpg	297.64	J/mol×K	624.92	Joback Method
cpg	307.86	J/mol×K	665.61	Joback Method
cpg	317.44	J/mol×K	706.29	Joback Method
cpg	326.43	J/mol×K	746.97	Joback Method
cpg	334.85	J/mol×K	787.65	Joback Method

cpg	342.74	J/mol×K	828.34	Joback Method
dvisc	0.0009758	Pa×s	387.29	Joback Method
dvisc	0.0007129	Pa×s	420.12	Joback Method
dvisc	0.0005451	Pa×s	452.94	Joback Method
dvisc	0.0004322	Pa×s	485.76	Joback Method
dvisc	0.0003529	Pa×s	518.59	Joback Method
dvisc	0.0002952	Pa×s	551.41	Joback Method
dvisc	0.0002519	Pa×s	584.24	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.45085e+01
Coeff. B	-4.50381e+03
Coeff. C	-9.63160e+01
Temperature range (K), min.	413.02
Temperature range (K), max.	586.02

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6942990&Units=SI

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Joback Method: https://en.wikipedia.org/wiki/Joback_method

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume