Methane-d tribromo-

Other names: tribromo(2H)methane
Tribromomethane-d1
Inchi: InChI=1S/CHBr3/c2-1(3)4/h1H/i1D
InchiKey: DIKBFYAXUHHXCS-MICDWDOJSA-N
Formula: CDBr3
SMILES: BrC(Br)Br
Mol. weight [g/mol]: 253.74
CAS: 2909-52-6

Physical Properties

Property code	Value	Unit	Source
gf	-1.94	kJ/mol	Joback Method
hf	9.74	kJ/mol	Joback Method
hfus	10.68	kJ/mol	Joback Method
hvap	36.74	kJ/mol	Joback Method
log10ws	-2.64		Crippen Method
logp	2.455		Crippen Method
mcvol	77.450	ml/mol	McGowan Method
pc	8279.51	kPa	Joback Method
tb	420.32	K	Joback Method
tc	661.75	K	Joback Method
tf	265.43	K	Joback Method
vc	0.272	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	80.84	J/mol×K	420.32	Joback Method
cpg	89.98	J/mol×K	621.52	Joback Method
cpg	88.68	J/mol×K	581.28	Joback Method
cpg	87.16	J/mol×K	541.04	Joback Method
cpg	85.37	J/mol×K	500.80	Joback Method
cpg	83.28	J/mol×K	460.56	Joback Method
cpg	91.09	J/mol×K	661.75	Joback Method

dvisc	0.0005468	Pa×s	420.32	Joback Method
dvisc	0.0006691	Pa×s	394.50	Joback Method
dvisc	0.0008422	Pa×s	368.69	Joback Method
dvisc	0.0010976	Pa×s	342.88	Joback Method
dvisc	0.0014934	Pa×s	317.06	Joback Method
dvisc	0.0021459	Pa×s	291.25	Joback Method
dvisc	0.0033088	Pa×s	265.43	Joback Method

Sources

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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2909526&Units=SI

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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume