bromo(2H3)methane

Other names: Methylbromide-d3
Inchi: InChI=1S/CH3Br/c1-2/h1H3/i1D3
InchiKey: GZUXJHMPEANEGY-FIBGUPNXSA-N
Formula: CD3Br
SMILES: CBr
Mol. weight [g/mol]: 97.96
CAS: 1111-88-2

Physical Properties

Property code	Value	Unit	Source
gf	-28.14	kJ/mol	Joback Method
hf	-37.64	kJ/mol	Joback Method
hfus	3.63	kJ/mol	Joback Method
hvap	24.26	kJ/mol	Joback Method
log10ws	-0.67		Crippen Method
logp	1.011		Crippen Method
mcvol	42.450	ml/mol	McGowan Method
pc	6451.51	kPa	Joback Method
tb	288.44	K	Joback Method
tc	473.09	K	Joback Method
tf	160.83	K	Joback Method
vc	0.153	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	42.04	J/mol×K	288.44	Joback Method
cpg	53.83	J/mol×K	442.32	Joback Method
cpg	51.71	J/mol×K	411.54	Joback Method
cpg	49.48	J/mol×K	380.77	Joback Method
cpg	47.12	J/mol×K	349.99	Joback Method
cpg	44.65	J/mol×K	319.22	Joback Method
cpg	55.85	J/mol×K	473.09	Joback Method
dvisc	0.0003302	Pa×s	288.44	Joback Method

dvisc	0.0003994	Pa×s	267.17	Joback Method
dvisc	0.0004993	Pa×s	245.90	Joback Method
dvisc	0.0006511	Pa×s	224.63	Joback Method
dvisc	0.0008975	Pa×s	203.37	Joback Method
dvisc	0.0013334	Pa×s	182.10	Joback Method
dvisc	0.0021998	Pa×s	160.83	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=C1111882&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume