

Acetic acid, bromo-, 1,1-dimethylethyl ester

Other names:	BrCH ₂ C(O)OC(CH ₃) ₃ tert-Butyl bromoacetate t-Butyl bromoacetate Acetic acid, bromo-, tert-butyl ester
Inchi:	InChI=1S/C6H11BrO2/c1-6(2,3)9-5(8)4-7/h4H2,1-3H3
InchiKey:	BNWCETAHAJSBFG-UHFFFAOYSA-N
Formula:	C ₆ H ₁₁ BrO ₂
SMILES:	CC(C)(C)OC(=O)CBr
Mol. weight [g/mol]:	195.05
CAS:	5292-43-3

Physical Properties

Property code	Value	Unit	Source
gf	-217.12	kJ/mol	Joback Method
hf	-394.39	kJ/mol	Joback Method
hfus	11.95	kJ/mol	Joback Method
hvap	43.25	kJ/mol	Joback Method
log10ws	-1.74		Crippen Method
logp	1.723		Crippen Method
mcvol	120.340	ml/mol	McGowan Method
pc	3628.97	kPa	Joback Method
rinpol	949.00		NIST Webbook
rinpol	949.00		NIST Webbook
ripol	1359.00		NIST Webbook
tb	475.90	K	Joback Method
tc	683.03	K	Joback Method
tf	291.76	K	Joback Method
vc	0.447	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	238.55	J/mol×K	475.90	Joback Method
cpg	249.29	J/mol×K	510.42	Joback Method

cpg	259.40	J/molxK	544.94	Joback Method
cpg	268.93	J/molxK	579.47	Joback Method
cpg	277.88	J/molxK	613.99	Joback Method
cpg	286.30	J/molxK	648.51	Joback Method
cpg	294.19	J/molxK	683.03	Joback Method
dvisc	0.0033846	Paxs	291.76	Joback Method
dvisc	0.0019006	Paxs	322.45	Joback Method
dvisc	0.0011798	Paxs	353.14	Joback Method
dvisc	0.0007905	Paxs	383.83	Joback Method
dvisc	0.0005619	Paxs	414.52	Joback Method
dvisc	0.0004187	Paxs	445.21	Joback Method
dvisc	0.0003241	Paxs	475.90	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	323.20	K	1.30	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=C5292433&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
ripol:	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

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