# Ethyl tribromoacetate

**Other names:** Acetic acid, 2,2,2-tribromoethyl ester
**Inchi:** InChI=1S/C4H5Br3O2/c1-2-9-3(8)4(5,6)7/h2H2,1H3
**InchiKey:** ZZUKBDJWZXVOQG-UHFFFAOYSA-N
**Formula:** C4H5Br3O2
**SMILES:** CCOC(=O)C(Br)(Br)Br
**Mol. weight [g/mol]:** 324.79
**CAS:** 599-99-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -205.32 | kJ/mol | Joback Method |
| hf | -300.45 | kJ/mol | Joback Method |
| hfus | 17.34 | kJ/mol | Joback Method |
| hvap | 51.66 | kJ/mol | Joback Method |
| log10ws | -2.76 | | Crippen Method |
| logp | 2.388 | | Crippen Method |
| mcvol | 127.160 | ml/mol | McGowan Method |
| pc | 5653.23 | kPa | Joback Method |
| tb | 562.46 | K | Joback Method |
| tc | 808.56 | K | Joback Method |
| tf | 388.82 | K | Joback Method |
| vc | 0.459 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 215.73 | J/mol×K | 562.46 | Joback Method |
| cpg | 222.21 | J/mol×K | 603.48 | Joback Method |
| cpg | 228.07 | J/mol×K | 644.49 | Joback Method |
| cpg | 233.37 | J/mol×K | 685.51 | Joback Method |
| cpg | 238.16 | J/mol×K | 726.53 | Joback Method |
| cpg | 242.52 | J/mol×K | 767.54 | Joback Method |
| cpg | 246.51 | J/mol×K | 808.56 | Joback Method |
| dvisc | 0.0017474 | Pa×s | 388.82 | Joback Method |

| | | | | |
|---|---|---|---|---|
| dvisc | 0.0011913 | Pa×s | 417.76 | Joback Method |
| dvisc | 0.0008535 | Pa×s | 446.70 | Joback Method |
| dvisc | 0.0006368 | Pa×s | 475.64 | Joback Method |
| dvisc | 0.0004913 | Pa×s | 504.58 | Joback Method |
| dvisc | 0.0003899 | Pa×s | 533.52 | Joback Method |
| dvisc | 0.0003169 | Pa×s | 562.46 | Joback Method |

# Pressure Dependent Properties

| Property code | Value | Unit | Pressure [kPa] | Source |
|---|---|---|---|---|
| tbrp | 421.20 | K | 9.70 | NIST Webbook |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C599995&Units=SI
**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
**tb:** Normal Boiling Point Temperature
**tbrp:** Boiling point at reduced pressure
**tc:** Critical Temperature

**tf:** Normal melting (fusion) point

**vc:** Critical Volume